

```

ctgctataaa gtcttggttaa aacagcatta ctatgaagag gatgaactca cctaccttca 300
natggaggaa aagtgaaaag gacttaggct ttagtcctcc atgacttttc ttaagcacta 360
cctacctgta ataagctgag tgcaaaagga tgccgaagaa aatctgcacc cagaagctgt 420
tagaaagcac tgcagangaa cagggnatga ataaaataaa nagntcttaa taaaccctta 480
agattctttg ntcaagggnn actttgccaa aaggggcaga atangngggn aaagagttgc 540
ttttaatcta gctctacact ggcntttgaa aataaaattt gccatttng aaatatatng 600
ggntataatt aaaatgnggc tttttacact gngggggcta tataaaaact gggtagntaa 660
atctccaccg agcatntatg gngatttgnt cacagnaaac ctccgggcng gacccacgct 720
aaggnggaa ttccagcnac antggggggg ncngntacct anagtggatc ccnagnctng 780
gggncccn aactttgggg gngtnaatc 809

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<210> 1663

<211> 585

<212> DNA

<213> Homo sapiens

<400> 1663

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gatatctaca aggctaataa cattgcctat gaagatgtgg tcgggggaga agactggaac 180
ccagtagagg agaaaataga gagtcaaacc caggaagagg tgagagacag caaagagaat 240
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gaagaagatc ttcggaaaga gagtaaagac caactctcag atgatgtctc caaagtaatt 360
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ggggaaaggg ccaccaggct ttttgagaaa cctcttgatt ctcatgtctat ttatcagacc 480
tcggcccgga ccacgctaag ggccaattcc agcacactgg cgcccggtac tagtggatcc 540
gagctcggtg ccaagcttgg cgtaatcatg gtcatagctg tttcc 585

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<210> 1664

<211> 999

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 2, 5, 10, 22, 83, 150, 176, 189, 264, 275, 283, 286, 302,
311, 318, 338, 374, 524, 528, 531, 536, 541, 606, 611, 614,
616, 621, 634, 635, 636, 644, 659, 682, 688, 702, 715, 723,
726, 768, 777, 779, 789, 796, 802, 810, 819, 831, 836

<223> n = A,T,C or G

<221> misc_feature

<222> 853, 854, 869, 874, 893, 900, 903, 911, 989, 999

<223> n = A,T,C or G

<400> 1664

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aagtccaaaa ctactcacac gcatctcttn attggggaaa agctgagact attatncatt 180
cttggtagnc ttgcaacctt gcatgaagag caccatttgc atttctttca tctttcagaa 240
agcaccggta tctgttccaa gggntaaca gtacnaaaat acnttntggg attacacctt 300
tnaaacccaa nactgttntc attaaaaata attttgntt gtaacaaaat tatgaaatac 360
aatgcaagca cctnggtata gcattattac tgaaccact taattcccag ctttttgagt 420
tttttaaaaa aaccactgc actaagattc acaattcatt gctacatata aattaaagct 480

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agtaagaaca cactaacgtc acaagtttct cattctaaag tgcnaaancc ntaatngtct 540
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tggaangtca ntantntttt naatccccaag aggnnncatt tctnttttaa aaaattggnt 660
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aagggggggt cgnaaaaaaa tttctcccna aganaaaccc acctttgggg cgngggggacn 900
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```

<210> 1665

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1665

gctaaaggtg accccaagaa accaaaag

27

<210> 1666

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1666

ctattaactc gagggagaca gataaacagt ttcttta

37

<210> 1667

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1667

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Met Gln His His His His His His Ala Lys Gly Asp Pro Lys Lys Pro
 1          5          10          15
Lys Gly Lys Met Ser Ala Tyr Ala Phe Phe Val Gln Thr Cys Arg Glu
 20          25          30
Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala Glu Phe
 35          40          45
Ser Lys Lys Cys Ser Glu Arg Trp Lys Thr Met Ser Gly Lys Glu Lys
 50          55          60
Ser Lys Phe Asp Glu Met Ala Lys Ala Asp Lys Val Arg Tyr Asp Arg
 65          70          75          80
Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys Lys Asp
 85          90          95
Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe Phe Leu Phe Cys Ser
100          105          110
Glu Phe Arg Pro Lys Ile Lys Ser Thr Asn Pro Gly Ile Ser Ile Gly
115          120          125

```

Asp Val Ala Lys Lys Leu Gly Glu Met Trp Asn Asn Leu Asn Asp Ser
 130 135 140
 Glu Lys Gln Pro Tyr Ile Thr Lys Ala Ala Lys Leu Lys Glu Lys Tyr
 145 150 155 160
 Glu Lys Asp Val Ala Asp Tyr Lys Ser Lys Gly Lys Phe Asp Gly Ala
 165 170 175
 Lys Gly Pro Ala Lys Val Ala Arg Lys Lys Val Glu Glu Glu Asp Glu
 180 185 190
 Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu
 195 200 205

<210> 1668

<211> 636

<212> DNA

<213> Homo sapiens

<400> 1668

catatgcagc atcaccacca tcaccacgct aaaggtgacc ccaagaaacc aaagggcaag 60
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 gaggtccctg tcaattttgc ggaattttcc aagaagtgtc ctgagaggtg gaagacgatg 180
 tccgggaaaag agaaatctaa atttgatgaa atggcaaagg cagataaagt gcgctatgat 240
 cgggaaatga aggattatgg accagctaag ggaggcaaga agaagaagga tcctaattgct 300
 cccaaaaggc caccgtctgg attcttcctg ttctgttcag aattccgccc caagatcaaa 360
 tccacaaacc ccggcatctc tattggagac gtggcaaaaa agctgggtga gatgtggaat 420
 aattttaaag acagtgaaaa gcagccttac atcactaagg cggcaaagct gaaggagaag 480
 tatgagaagg atgttgctga ctataagtcg aaaggaaagt ttgatgggtc aaaggggtcca 540
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<210> 1669

<211> 2821

<212> DNA

<213> Homo sapiens

<400> 1669

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 ggggtgaggc cggaccgcgg cggggtcggg ggagaaacgc gcgctgccct ggcacggggc 180
 ccaaccccc cgcgcgcgcg aatggtatgg cccggccgga gttaaggccg gggggaggcg 240
 gcgagtccc cggcggcggc gacgatgggg ctgctgtcag gaggaacgct gggcagggcc 300
 ggcgcgggtc ggggggcgcc cgagggggcc gggccgagcg gcggcgcgca gggcggcagc 360
 atccactcgg gccgcacgc cgcggtgcac aacgtgccgc tgagcgtgct catccggccg 420
 ctgccgtccg tgttggaacc cgccaaggtg cagagcctcg tggacacgat ccgggaggac 480
 ccagacagcg tgcccccat cgatgtcctc tggatcaaa gggcccagg aggtgactac 540
 ttctactcct ttgggggctg ccaccgctac gcggcctacc agcaactgca gcgagagacc 600
 atccccgcca agcttggtcca gtccactctc tcagacctaa ggggtgtacct gggagcatcc 660
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 ccttgaagca ttaccgagaa ggagaacaga gatgggcttg aagagccacg tgctgccggc 960
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tgtttttcca catagcatgg attctggaga tgggtggcta atggtattgg ttcaacaact 1140
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 taatttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2820
 a 2821

<210> 1670

<211> 137

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Gly	Leu	Arg	Ala	Gly	Gly	Thr	Leu	Gly	Arg	Ala	Gly	Ala	Gly	Arg
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Gly	Ala	Pro	Glu	Gly	Pro	Gly	Pro	Ser	Gly	Gly	Ala	Gln	Gly	Gly	Ser
		20						25				30			
Ile	His	Ser	Gly	Arg	Ile	Ala	Ala	Val	His	Asn	Val	Pro	Leu	Ser	Val
		35					40					45			
Leu	Ile	Arg	Pro	Leu	Pro	Ser	Val	Leu	Asp	Pro	Ala	Lys	Val	Gln	Ser
	50					55					60				
Leu	Val	Asp	Thr	Ile	Arg	Glu	Asp	Pro	Asp	Ser	Val	Pro	Pro	Ile	Asp
	65				70				75					80	
Val	Leu	Trp	Ile	Lys	Gly	Ala	Gln	Gly	Gly	Asp	Tyr	Phe	Tyr	Ser	Phe
			85					90						95	
Gly	Gly	Cys	His	Arg	Tyr	Ala	Ala	Tyr	Gln	Gln	Leu	Gln	Arg	Glu	Thr
		100						105				110			
Ile	Pro	Ala	Lys	Leu	Val	Gln	Ser	Thr	Leu	Ser	Asp	Leu	Arg	Val	Tyr
	115						120					125			
Leu	Gly	Ala	Ser	Thr	Pro	Asp	Leu	Gln							

130

135

<210> 1671
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1671
 Met Ala Arg Pro Glu Leu Arg Pro Gly Gly Gly Gly Glu Ser Arg Gly
 1 5 10 15
 Gly Gly Asp Asp Gly Ala Ala Cys Arg Arg Asn Ala Gly Gln Gly Arg
 20 25 30
 Arg Gly Ser Gly Gly Ala Arg Gly Ala Arg Ala Glu Arg Arg Arg Ala
 35 40 45
 Gly Arg Gln His Pro Leu Gly Pro His Arg Arg Gly Ala Gln Arg Ala
 50 55 60
 Ala Glu Arg Ala His Pro Ala Ala Ala Val Arg Val Gly Pro Arg Gln
 65 70 75 80
 Gly Ala Glu Pro Arg Gly His Asp Pro Gly Gly Pro Arg Gln Arg Ala
 85 90 95
 Pro His Arg Cys Pro Leu Asp Gln Arg Gly Pro Gly Arg
 100 105

<210> 1672
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1672
 Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln
 1 5 10 15
 Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile
 20 25 30
 Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln
 35 40 45
 Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met
 50 55 60
 Val Leu Val Gln Gln Leu His Glu Gly Arg Gly His Val Leu Asp Pro
 65 70 75 80
 Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys
 85 90 95
 Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly
 100 105 110
 Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val
 115 120 125
 Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe
 130 135 140
 Thr
 145

<210> 1673

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1673

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Met Asp Tyr Ile Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly
 1          5          10          15
Leu Asn Lys Gln Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp
          20          25          30
Gly Trp Leu Met Val Leu Val Gln Gln Leu His Glu Gly Arg Gly His
          35          40          45
Val Leu Asp Pro Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser
          50          55          60
Gln Asp Gly Cys Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg
65          70          75          80
Arg Gly Gly Gly Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe
          85          90          95
Tyr Gln Lys Val Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro
          100          105          110
Leu His Ile Phe Thr
          115

```

<210> 1674

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1674

```

Met Asp Ser Gly Asp Gly Trp Leu Met Val Leu Val Gln Gln Leu His
 1          5          10          15
Glu Gly Arg Gly His Val Leu Asp Pro Phe Ala Leu Ile Ser Val Leu
          20          25          30
Val Thr Ser Trp Ser Gln Asp Gly Cys Cys Ile Pro Lys Asn His Val
          35          40          45
Cys Val Gln Gly Arg Arg Gly Gly Gly Arg Gly Arg Ala Lys Leu Ala
          50          55          60
Gly Pro Val Thr Phe Tyr Gln Lys Val Lys Pro Arg Gln Lys Ser Val
65          70          75          80
Ser Cys Ser Leu Pro Leu His Ile Phe Thr
          85          90

```

<210> 1675

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1675

```

Met Gln Asn Cys Val Pro Val Ser Phe Cys Cys Val Thr Asn His Pro
 1          5          10          15
Gln Thr Trp Gln Leu Glu Thr Asn Pro Val Phe Ser His Asn Pro Met
          20          25          30
Gly Trp Gln Phe Gly Leu Gly Ser Thr Gly Gln Phe Cys Cys Ser His

```

35 40 45
 Leu Gly Ser Leu Met Glu Leu Arg Ser Ala Val Thr Ser Ala Gly Pro
 50 55 60
 Gly Trp Ser Arg Ile Ala Leu Leu Thr Cys Leu Ala Gly Asp Arg Leu
 65 70 75 80
 Leu Ala Gly Ile Ala Trp Phe Ser Ser Met Trp Pro Leu Gln Gln Ala
 85 90 95
 Ser Ser Gly Leu Phe Thr
 100

<210> 1676

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 1676

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 ccctaccacc caactggccc cagtacattc attctctcag gaaaaaaaaac aaggtcccca 120
 cagcaaagaa aaggaatagg atcaagagat acgtggctgc tggcagagca agcatgaatt 180
 cgatgacttc agcagttccg gtggccaatt ctgtgttggg ggtggcaccc cacaatgggt 240
 atcctgtgac cccaggaatt atgtctcacg tgcccctgta tccaaacagc cagccgcaag 300
 tccacctagt tcttgggaac ccacctagtt tgggtgctgaa tgtgaatggg cagcctgtgc 360
 agaaagctct gaaagaaggc aaaaccttgg gggccatcca gatcatcatt ggcttggctc 420
 acatcggcct cggctccatc atggcgacgg ttctcgtagg ggaataacctg tctatttcat 480
 tctacggagg ctttcccttc tggggaggct tgtggtttat catttcagga tctctctccg 540
 tggcagcaga aaatcagcca tattcttatt gcctgctgtc tggcagtttg ggcttgaaca 600
 tcgtcagtg c aatctgctct gcagttggag tcatactctt catcacagat ctaagtattc 660
 cccacccata tgectacccc gactattatc cttacgcctg ggggtgtaac cctggaatgg 720
 cgattttctg cgtgctgctg gtcttctgcc tccctggagt tggcatcgca tgcgcatctt 780
 cccacttttg ctgccagttg gtctgctgtc aatcaagcaa tgtgagtgtc atctatccaa 840
 acatctatgc agcaaacc ca gtgatcaccc cagaaccggg gacctacca ccaagttatt 900-
 ccagtgaat ccaagcaa at aagtaaggct acagattctg gaagcatctt tcaactgggac 960
 caaaagaagt cctcctccct ttctgggctt ccataaccca ggtcgttctt gttctgacag 1020
 ctgaggaaac gtctctccca ctgtttgtac tctcaccttc attcttcaat tcagtctagg 1080
 aaaccatgct gtttctctat caagaagaag acagagattt taaacagatg ttaaccaaga 1140
 gggactccct agggcacatg catcagcaca tatgtgggca tccagcctct ggggccttgg 1200
 cacacacaca ttcgtgtgct ctgctgcatg tgagcttgtg ggtagagga acaaatatct 1260
 agacattcaa tcttcaactt ttcaattgtg cattcattta ataaatagat actgagcatt 1320
 caatgtgaaa aaaaaa 1336

<210> 1677

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1677

Met Asn Ser Met Thr Ser Ala Val Pro Val Ala Asn Ser Val Leu Val
 1 5 10 15
 Val Ala Pro His Asn Gly Tyr Pro Val Thr Pro Gly Ile Met Ser His
 20 25 30
 Val Pro Leu Tyr Pro Asn Ser Gln Pro Gln Val His Leu Val Pro Gly
 35 40 45
 Asn Pro Pro Ser Leu Val Ser Asn Val Asn Gly Gln Pro Val Gln Lys

50 55 60
 Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala Ile Gln Ile Ile Ile Gly
 65 70 75 80
 Leu Ala His Ile Gly Leu Gly Ser Ile Met Ala Thr Val Leu Val Gly
 85 90 95
 Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly Phe Pro Phe Trp Gly Gly
 100 105 110
 Leu Trp Phe Ile Ile Ser Gly Ser Leu Ser Val Ala Ala Glu Asn Gln
 115 120 125
 Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser Leu Gly Leu Asn Ile Val
 130 135 140
 Ser Ala Ile Cys Ser Ala Val Gly Val Ile Leu Phe Ile Thr Asp Leu
 145 150 155 160
 Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala Trp
 165 170 175
 Gly Val Asn Pro Gly Met Ala Ile Ser Gly Val Leu Leu Val Phe Cys
 180 185 190
 Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser Ser His Phe Gly Cys Gln
 195 200 205
 Leu Val Cys Cys Gln Ser Ser Asn Val Ser Val Ile Tyr Pro Asn Ile
 210 215 220
 Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu Pro Val Thr Ser Pro Pro
 225 230 235 240
 Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
 245 250

<210> 1678

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1678

Thr Arg Pro Arg Arg Ala Ala Gln Gly Arg Arg Glu Ala Pro Pro Gly
 1 5 10 15
 Gly Glu Pro Glu Pro Arg Ala Ser Leu Ala Ala Pro Gly Glu Arg Ser
 20 25 30
 Arg Ser Arg Ala Gly Asp Arg Gly Val Glu Ala Gly Pro Arg Arg Gly
 35 40 45
 Arg Gly Arg Asn Ala Arg Cys Pro Gly Thr Gly Pro Asn Pro Pro Ala
 50 55 60
 Ala Arg Asn Gly Met Ala Arg Pro Glu Leu Arg Pro Gly Gly Gly Gly
 65 70 75 80
 Glu Ser Arg Gly Gly Gly Asp Asp Gly Ala Ala Cys Arg Arg Asn Ala
 85 90 95
 Gly Gln Gly Arg Arg Gly Ser Gly Gly Ala Arg Gly Ala Arg Ala Glu
 100 105 110
 Arg Arg Arg Ala Gly Arg Gln His Pro Leu Gly Pro His Arg Arg Gly
 115 120 125
 Ala Gln Arg Ala Ala Glu Arg Ala His Pro Ala Ala Ala Val Arg Val
 130 135 140
 Gly Pro Arg Gln Gly Ala Glu Pro Arg Gly His Asp Pro Gly Gly Pro
 145 150 155 160
 Arg Gln Arg Ala Pro His Arg Cys Pro Leu Asp Gln Arg Gly Pro Gly

Arg 165 170 175

<210> 1679
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 1679
 Leu Val Cys Cys Gln Ser Ser Asn Val Ser Val Ile Tyr Pro Asn Ile
 1 5 10 15
 Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu Pro Val Thr Ser Pro Pro
 20 25 30
 Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
 35 40

<210> 1680
 <211> 717
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 22, 586, 687, 714
 <223> n = A,T,C or G

<400> 1680
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 ttctcacgtt ccagtctggg aaaatggtcc acataaggca aggcaaagaa tcgtttccta 120
 ttgtatcttt tatttaggtg ccaaggtata acccactgct tgaacttggt ccagatgatt 180
 cttccaaaga tgtctcttct ccaagcacca ggtctagctc tttcttgacc agtctgaaga 240
 agccttaggg catcttctct ttcttgga caacttatcta atgcatccat ggaatctact 300
 accttatcta accgctctgg acttggcatt ggcaatctct gccgcttggc ctctgctct 360
 agggttagaa gcatgtttct ttctttcagt aagacatacc aaagtgtgtg taaatcttca 420
 ttacttttgt tccttaggtg ctgacaggct catgctgctc cagattttac tttttcttgc 480
 cccagtttt ttgggtcatc aaaaaattct tctagtcctt tccttgacaa tgtgggtatga 540
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 aaaaaccctg tcaggcaggg acctgaggag ttattaacga accgggaaga attcagggcg 660
 gatgaaactc tcctaccaag aaagggncaa accgggccgc agccatgttt tccncat 717

<210> 1681
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 1681
 ctgtacattt aacaaaatat gtgcaagact gtcattggtga aaactacaaa acaatgataa 60
 aagaaattca agaaaacaaa taaatacagg ggtatactat attcatgaat tgggagaatc 120
 aatatcatta ttaagtctcc tcagattgat ctatagattc acagaaatcc caattcaaac 180
 cctatcagga ctattttag aaatagacac actgatgata aaatttacat agaaacacaa 240
 aggaagcaga atagccaaaa attattgggg aaaaaatgta gttgaaggat tcccattact 300

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305

<400>	1682						
aaattacact	ccataaattt	agacatatgt	ctctccaagt	aagtacgagc	tgattgggaa	60	
cgggctccaa	tggacatggc	tctgcagtca	aaatagttag	cagatggaca	ggtttggaaa	120	
atgtgagggc	ccatatcatc	ataaccagca	ataaggagac	caacaccata	tggtctccgg	180	
ccatatcgtt	gtgttggtat	ctgggtctct	tagactggtt	aacgagcttg	ttttaacaag	240	
gaatgaagta	ctgtctttat	tttcaaatta	tacattatta	acaagggtct	ctggcttatt	300	
ctttaattgt	tgcataatcc	accagagaaa	taatgcaata	ggacactatt	tctttggcct	360	
aatataaaat	gtttgacttt	ctaccgaacc	taagaaagag	tgccagcaaa	ataatttctt	420	
cccattctaaa	acctgatttg	ttttggatac	aaggggggtct	aggatttctt	gggacattcta	480	
gaaccattaa	gaaacttt					498	

<400> 1683						
aaaaattaaa	aatagcacia	ttctacaatt	ctgatttttac	caagaaaata	aacctttttt	60
ggcacatat	atcctatgaa	aatggaaaagc	tgagtcaggc	tgctctgctt	ttcacagcac	120
aaataagcat	tcatgctatc	agacttgggg	aattaactcg	gtgacaaaaa	ttcactggaa	180
aatagaatcc	ttggaaaaat	ggggtcagggt	gccactccact	gagaggcaat	gataatgtgt	240
gtccttcggt	attagcacaa	agttaggcag	cacactataa	ttttagctac	atgcaactct	300
ataggaacac	atgtgggtaa	gg				322

```
<220>
<221> misc_feature
<222> 51, 182, 188, 195, 203, 220, 246
<223> n = A,T,C or G
```

```
<210> 1685
<211> 390
<212> DNA
<213> Homo sapiens
```

<400> 1685

```

aaattgtcta actcctatcc cagtttcttt ttatagtcta aaaacaagga atcacccaag 60
taagatactc cttcagagca ctgctgaaaa cggatcaaac gtagagatcc cccagatccc 120
tgttctcaag tgttaaaaaat attttatatt agcacataga atacccttag atatattctg 180
ttatgttcta aagagtttgt gtttccccct ttttgatgat gtcttcaatt tcttctgaga 240
cctttcctgt atagtcattt gggtctattg cttttaactt ctcttgatac tccagcggca 300
aaccattttc ttttgacccc atgcaaataa tctttttata ctgtggggat gggggagcac 360
tttcgtaatt tgatcatcaga taacttcgac 390

```

<210> 1686

<211> 549

<212> DNA

<213> Homo sapiens

<400> 1686

```

gggtccagtc caacctgctc ctcattattg taaacatgtg cagaatcaat atgggtggaac 60
ccggcttcta ttgccaattt gacggcctct agagctttac ttttaggaac ctgggggagc 120
aaccaaacgt aatattttct gactaatgtg cctgagagtt agttcgggca caagcagcaa 180
cgttcacaaa aatcagcttt tcctcctttc ttggatgagc tctgtatgta gaatcataag 240
cccatccag tctgactggg tctttcccat ttagtaataa aggttgggca tagcaggaac 300
ttctgcagtc ccagaaaaat cactgaaagt ggaagtgtcc ccaaaacaat ttcactttca 360
gtgatttttt ggaaaaatca acaggacgca actatagtta cagacataat cttattatt 420
tttagtatgg tgaaattaac acaaggaaat agccacatgg aaggaattat gaagggaatgc 480
agtgtgaagc cctgtgattc ctctcccacc atgttgcaca gagcgactg actttatcca 540
gcatcatat 549

```

<210> 1687

<211> 442

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 34, 50, 67, 382, 384, 385, 435

<223> n = A,T,C or G

<400> 1687

```

caactgcaaa tgaagatcct ttttgatac ttngtgagaa agacacattn ggggggggggt 60
tgtgacnaaa ataacgatgg ccggcttgat ccccaagagc tgttaccttg ggtagtacct 120
aataatcagg gcattgcaca agaggaggcg cttcatctaa ttgatgaaat ggatttgaat 180
ggtgacaaaa agctctctga agaagagatt ctggaaaacc cggacttggt tctcaccagt 240
gaagccacag attatggcag acaggctcca tgatgactat ttctatcatg atgagcttta 300
atctccgagc ctgtctcagt agagtactgg ctctttttat aatttggttac cagctttact 360
tttgtgataa aatattgatg tngnntttta cactcttaag tcttaaccac agtcacaatt 420
atcttaatgt agatnataat tg 442

```

<210> 1688

<211> 340

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 23, 52, 56, 58, 60, 62

<223> n = A,T,C or G

<400> 1688
 ctgccagcta acagcaagag cnttgagggc atcactgaac agatagcacc tnatgngntn 60
 tnatgattca aaaatctccc ttgctgttgg atttaccac acgtaggctt ttatttcttc 120
 ccattacatc tgttttagcca cagaaagcat cgggccatac tctactgcaga agataagact 180
 tcttcagaat cttatttgtt tagtgcactc aattttactt cactgtctca tcaattgaga 240
 gactggttaa ggcaagaaac ccatttctta acattttttt tgttttcaaa catttgaaaa 300
 gcaacaccaa aacgtatgca gttaattcct caattctttc 340

<210> 1689
 <211> 140
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 61
 <223> n = A,T,C or G

<400> 1689
 ccagagggcc tgcacatgca atttccagtc cctgccttca gagagctgaa aagggggcct 60
 nggtctttta ttccagggct ttgcatgcgc tctattcccc ctctgcctct cccacacctc 120
 tttggagcaa ggagatgcag 140

<210> 1690
 <211> 485
 <212> DNA
 <213> Homo sapiens

<400> 1690
 gagattatta cccagaattc acatgtaggg atggggaagg acaatttttt tttaactaaa 60
 aaagttggcg gcaggggtgg ggggtggcaa tcatttttct tcctatacat acaaaggata 120
 ttgtcaaaaa tggcgttctt ctcttggtgc ctgttattct gattgctgct gtatacagtt 180
 ttgtcactct ttagttttta gttaagcata ctgatagact ttctctataa agccattcac 240
 tccagatttt acctggggaa tattctacat actgcttact ttctctataa aactcatcaa 300
 taaatcatga aaggcactga gttttgtaaa tcaggaccct aaatgtttta ttgtaaataa 360
 gtttcagata attattatag ctttgcggtg aagtttggtg ttttttttct caactagtta 420
 agtcaactgc ttctgaaata actctgtatt gtagattatg cagatcttta caggcataaa 480
 tattt 485

<210> 1691
 <211> 342
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 11, 24, 26, 49, 50, 51, 53, 61, 62, 142, 173, 190, 193, 242,
 250, 291, 303, 304, 315, 329
 <223> n = A,T,C or G

<400> 1691
 gaagaaacaa ngatgacttt tttanaaaca aagcataatg ctggcaatnn ngnggggggt 60
 nnagttttcc aaacatgtta tcttaaatac ccctttatcc ttacaggttg acataacttt 120

```

gaatgtttta acagcaagaa tnttaagaaa agataaacac cattttatatt atntataaaa 180
acaaaattan ttncaaatat ttttgacatt gtgatttttt ttttccacat ttctcagcaa 240
anctaattggn attttaatat ttattttttgc ctgtcataag aaaactctta nctgaaatgg 300
ccnnaaaact gtganacatg ctatggaanc tgaatgccgg ac 342

```

<210> 1692

<211> 450

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 23, 59, 60, 409, 417

<223> n = A,T,C or G

<400> 1692

```

aaaaatgggg ccccaaagac tgntaagagc tcatccccgt ggtctcctat caccgggggnn 60
ggggttcatg tctgatgaga agcttggacg gtactgaaac tcatacatgt aggtgggtgc 120
tccagcatct ctgtggttcc gggccacaat cacagatggg acaccaaaca tcacatctgc 180
tatcaagtcc aggaacaggt ctttcttttt gacagtgtcg tctgttcctc ctaagtattt 240
ctcagtggct tctggaatca gttccttagc aatgcaaaca aggggatagg acttccacag 300
gagtgcacat gctgtcttct ggtccagttg cccttcggag agtggatagc tcatcaactg 360
cattggaatc aaccagccaa actcctgctt gttaattccg accatgtang ggacagngtg 420
gaaattcctt tcagcttgaa agctcttcag 450

```

<210> 1693

<211> 436

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 20, 51, 52, 58, 62, 286, 323, 333, 375, 385, 399, 401, 402, 407, 410, 426, 432

<223> n = A,T,C or G

<400> 1693

```

ctattttatt aacatcatgn ttttaataaat aactggctac ttctaataaaa nnggggggnct 60
cngttttaca cagcccccaa tattccattt tgaccactct gcagaatttg gtgtaaaaag 120
ttgaatgaaa tgtagaccct gagctatcaa gtaattatgt ttcaatataa aaatagagaa 180
ttactcttac aactgaagat tgaacaataa cacaacaac ctctttgtgg gttttagggt 240
cggtaaaatt agttgggatc ttaatggctg tctaaagcag gaaganacag aattttaatc 300
tttctgaaga cttctgggaa ctnccttgaa agngatttgt taccttatca gagtttatga 360
gctattatct tggtnaaggc acaangaaag gattcccang nngttgntan tcttttgccc 420
tggaacnaaa anattg 436

```

<210> 1694

<211> 313

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 29, 32, 34

<223> n = A,T,C or G

<400> 1694

```
attatctgca aggttttttt gtgtgtgtnt tngnttttat tttcaatatg caagtttaggc 60
ttaatttttt tatctaataga tcatcatgaa atgaataaga gggcttaaga atttgtccat 120
ttgcattcgg aaaagaatga ccagcaaaag gtttactaat acctctccct ttggggattt 180
aatgtctgtg gctgccgcct gagtttcaag aattaaagct gcaagaggac tccaggagca 240
aaagaaacac aatatagagg gttggagttg ttagcaattt cattcaaaat gccaaactgga 300
gaagtctgtt ttt 313
```

<210> 1695

<211> 522

<212> DNA

<213> Homo sapiens

<400> 1695

```
ccattttcag gggaagcttg ggagagcaat agtatgggtga gccccttaga gatgagcgcc 60
tactccttct tggcgaatgc tgccttcaga tgcttaccaa gtggtcactg catctagtaa 120
gattatattt ccagtacact tccttagggc agaaacacca tcctatcagg ttggtcagt 180
cccttcttca tgaagggagt catggggaat tcctgaaaat tttcttcctt ctgcagacag 240
ttggatgagt cccttagaga aggcattccag agacataact aaactgaata tcatcccata 300
ttgattttag gaattgactc taaaactctg tgcagaatct tgtgttgga ttgtatcttg 360
acattcctgt tgtgttattt ttcttaactg gagtgtgtgc tgcctttcag gtacaatttt 420
tgtgtaataa aagccagtgc attaatgtta tatagactac tttctatgca agactgagat 480
atggaataga taggaagaga tatgtactgc tgggtacatg ga 522
```

<210> 1696

<211> 174

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 52, 55

<223> n = A,T,C or G

<400> 1696

```
ccagccattg cctggcattt ggtagtatag tatgattctc accattattt gncanggagg 60
cagacataca ccagaaatgg gggagaaaaca gtacatatct ttctgtcttt agtttattgt 120
gtgctgtgtc aagcaagctg agatcatttg caatggaaaa cacgtaactt gttt 174
```

<210> 1697

<211> 561

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 22, 55, 56, 198, 265, 374, 378, 399, 410, 465, 543, 549

<223> n = A,T,C or G

<400> 1697

```
ctgtaatgtt attgcagatc cncatctctc gctcaactgt taatgtctca acctnnagag 60
gcacccacc cagcacactg tcagtaaagg ggcagattga aacagtgaga gttaagggtta 120
```

```
<210> 1698
<211> 267
<212> DNA
<213> Homo sapiens
```

<400>	1698						
cgagggtctgc	cctcgattgt	gtattttctgt	tggatcaaac	actcccatgt	taccactngg	60	
cnncataatg	tatcgatata	tattccaagt	ggcaacaggt	aagttgagaa	ggaagatgaa	120	
ccagtgcaat	gacatgagca	gtaatacagt	gacaatggta	tggccactta	aattaaaaat	180	
ataacaaaat	tgaaaaatag	acataataacc	aaaaagattc	taaatcttgc	aaggaaaaaa	240	
agaataaaagc	tgccaataag	ttattttt				267	

<400>	1699						
tgттааgatt	ttttttgcta	caaagaggag	gtggcaatgg	tagatccacc	cttatgcttc	60	
tcagtttagc	ataacctctt	atggattttc	atcaaattca	gcgtgttggt	cactggaaag	120	
agccttttcc	ttctcctttt	cttactctcc	cctcatggtg	ttccccctctt	aaaggagagg	180	
agcttttaat	ttacacttac	cacctcattt	gcttttctgg	aggccatgca	atataggcgg	240	
gactacagag	ttaatctcct	ttttacaaat	gaggccaaga	gaagcctcat	tggttcacag	300	
tcatgcagct	catactgtcc	acccttgat	tctcagatgc	aggacaattg	cattttagtt	360	
ttattttgtg	gagggtgcaga	atattttactc	tttctgtcca	acccttgatt	ctgccgagga	420	
agacactgat	ggtttgatga	gtgattcag				449	

<400>	1700						
acatttcaca	aataagatgt	agctttccaa	acaaatccat	tcgatgacca	ttatcacaac	60	
tatatTTTT	tctaatttat	aaaacaaaaa	atggttagac	aagcacatga	tatcaagagt	120	
cttcaacaca	gtggattcca	ttttattaag	aaaaaaaata	gaaaacaagt	agtccttaaa	180	
ttgtcttagc	tctccatagc	atacgttata	taaaatttaa	gttttgcttc	caaaaatatg	240	
tttccatgtg	gtcgtggtgt	tgtccagtcg	tattagggcc	aaagcaccaa	agacatgaga	300	
agtttaacca	tcgacttgtc	atTTTTcata	aaagctaaac	atttccttat	aggtctggag	360	
taaaatcttc	taggcatttt	agtgcataaa	gtcacttt			398	

<210> 1701

<211> 257

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 4, 12, 13, 27, 47, 53, 61, 63, 76, 77, 78, 79, 86, 87, 88,
89, 92, 93, 97, 100, 101, 103, 127, 129, 130, 133, 134,
141, 142, 143, 147, 149, 152, 155, 164, 166, 174, 185, 188,
194, 203, 205, 220, 228, 237, 238, 240, 241, 246, 251

<223> n = A,T,C or G

<400> 1701

```
aaanaacact annggacctt agagatnata actgtttgat aatttgntct agncgtattg 60
ncntaaaaga tatatnnnng gggggnnnnt cnntgtnaan ngntgtttgg attgcctgat 120
attatancnn ggnngttggg nnntatntna cncantatac ctcnngcgcga accncgctaa 180
tggcnagnat catnacactg gcngncgtta ctactggatn cgagctcngt gccaatnncn 240
nctctcat  nccccta                               257
```

<210> 1702

<211> 526

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 9, 476

<223> n = A,T,C or G

<400> 1702

```
acctaattna ttgaagtaat aaccaaataa ttttcaatct tgattcaact gtgattcaaa 60
tcttacacca tttgccact tctatgaatt ttatgtataa aattttttaa gagtcagagt 120
tttttttctt gattaattgg atgtatttca cagaatttcc aactgctcac gttagttttc 180
ttccttttag agttgatctc tctaattgat tagatcttca tgcctttgat agtctctctg 240
gaataagttt gcagaaaaaa cttcagcatg tgccaggaac acaacctcac ctgcatcaga 300
gtattgttac aatcacattt gacgtaccag gaaatgcaaa ggaagaacat cttaatatgg 360
ttattcagaa tcttctgtgg gaaaagaatg tgagaaacaa ggacaatcac tgcattggagg 420
tcataaggct gaagggttg gtgtcaatca acgacaaatc acaacgagtg attgtncagg 480
ggggtccatg agctctggtg atccgggagg agactccaat gagctg                               526
```

<210> 1703

<211> 116

<212> DNA

<213> Homo sapiens

<400> 1703

```
gacctccgaa ctgagctcta atttagctga tcagattttg cttgggtaaa gttccttttt 60
aatgttctaa agtgtttacg gttctcaaat atcagttaaa aactaatttt aggtgg       116
```

<210> 1704

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 209, 230, 235

<223> n = A,T,C or G

<400> 1704

```

aaaaattgtg taattgttaa atgtccagtt ttgctctggt ttgcctgaag ttttagtatt 60
tgttttctag gtggacctct gaaaacccaa ccagtacctg gggaggtag atgtgtgttt 120
caggcttggg gtgtatgagt ggttttgctt gtattttcct ccagagattt tgaactttaa 180
taattgctgt tgtgtttttt ttttttttna aggggctttg ttttttttn tcaanaaaaa 240
t                                                                 241

```

<210> 1705

<211> 336

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 9, 12

<223> n = A,T,C or G

<400> 1705

```

ggtcctgtnt anacacacat caatatgaaa caaaaaaaat ttatataaat aagtcaatta 60
aacttcacaa aaactaaaga aacacaagac aaaaatccaa caagcaataa aaactgtaca 120
atattgggtc gtcttttata tctgaaaaat gtgtaactta aaaaaaagtt atttatcgta 180
taaaaaaagt cttttacatc tgtgttagct ggagtgaaaa cttgaagact cagactcagt 240
ggaaacagat gaatgtccac ctcgctttcc tttggagagg atcttgaggc tggaccctct 300
gctcacagag gtgagtgcgt gctgggcaga ggtttt                                                                 336

```

<210> 1706

<211> 107

<212> DNA

<213> Homo sapiens

<400> 1706

```

agggtggctc tgggagcagt tgtgctgcgg gcttgctggg ggagaactct aactgttgca 60
gaaacagagc ttcattggctt gcttaaatta cttagctgga atatttt                                                                 107

```

<210> 1707

<211> 512

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 468, 470

<223> n = A,T,C or G

<400> 1707

```

ttttttgtct ggtaattata tattttattat ttagcaaaac tgaagaaaaa aagcacagaa 60
ttgtttcaac agatgtctct cattttcagc tagcatttct ctccaagtt gagctggttt 120

```

```

aatgtgtttt ggatttccct cctcaattgg cttatttttt agatcacctg caattcattt 180
gcaaattgca ataaaacaca ttttagaaaa aaggaacctt caattattag ctttgtttct 240
ttttaaatgt atatatattt actaatgttt gtgaatgaag ttggctaaca tgtatttagt 300
ttcatttttg cggtatgtaa tataaagttt ttaaaatttt aaatatgggt ttaaccttta 360
tgtgtaaaatg attttctagt gtgaccttct aatttaatat tagacgtcta aggtatatct 420
gtaaattaga atccgactat cactctgttc attttttttg aacaaagnn ttaaagaaag 480
cctgaaccag ggaaaaaaaa aaaaaaaaaa aa 512

```

<210> 1708

<211> 203

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 28, 36

<223> n = A,T,C or G

<400> 1708

```

aatcttctaa aggaagaaca gaccccnag aataanatta cagttggttg gggtggtgct 60
gttggcatgg cctgtgccat cagtatctta atgaagacta taatgtaact gcaaactcca 120
agctggcat tatcacggct ggggcacgtc agcaagaggg agaaagccgt cttaattttg 180
tccagcgtaa cgtgaacatc ttt 203

```

<210> 1709

<211> 271

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1

<223> n = A,T,C or G

<400> 1709

```

ngttgaaaaa atagatccaa tcagtttata ccctagttag tgttttgcct cacctaatag 60
gctgggagac tgaagactca gcccggttg ggctgcagaa aaatgattgg cccagtccc 120
cttgtttgct ctttctacag gcatgaggaa tctgggaggc cctgagacag ggattgtgct 180
tcattccaat ctattgcttc accatggcct tatgaggcag gtgagagatg tttgaatttt 240
tctcttcctt ttagtattct tagttcttca g 271

```

<210> 1710

<211> 239

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 58

<223> n = A,T,C or G

<400> 1710

```

tacaaaatat ttttaattgta agtgggtcaga ggaattcttc tggtttctcc cttatggnta 60
tttttaattt gtacaatagt tgcttctgtc aactcagcga caatgccatc atagctttca 120

```

1708 1709 1710

aatgagatca ccctgtagat cgatggacta tgccttaaag ttgcagatgc ataaaggaga 180
ctgaggacaa atggtgaaaa ctgtagttac tgaacccaaa tggtactcag agatatcaa 239

<210> 1711

<211> 122

<212> DNA

<213> Homo sapiens

<400> 1711

agtgtaaagt aacacagaag agtgacatgt ttacaaacct caagccagcc ttgctcctgg 60
ctggggcctg ttgaagatgc ttgtatttta cttttccatt gtaattgcca tcgccatcac 120
ag 122

<210> 1712

<211> 169

<212> DNA

<213> Homo sapiens

<400> 1712

ttcccataaa taaaagtaca gttttcttgg tggcagaatg aaaatcagca acttctagca 60
tatagactat ataatcagat tgacagtata tagaatatat tatcagacaa gatgaggagg 120
tataaaagtt actattgctc ataatgactt acaggctaaa attagtttt 169

<210> 1713

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1713

tgacagagag gatggcgctg tcgaccatag tctcccagag gaagcagata aagcgggaagg 60
ctccccgtgg ctttctaaag cgagtcttca agcgaaagaa gcctcaactt cgtctggaga 120
aaagtgggtga cttattgggtc catctgaact gtttactgtt tgttcatcga tttagcagaag 180
agtccaggac aaacgcttgt gcgagtaaat gtagagtcac taacaaggag catgtactgg 240
ccgcagcaaa ggtaattcta aagaagagca gaggttagaa gtcaaagaac atattcttga 300
aagttatgat gcattctttt ggggtggaac agatcataaa gacatttttt acacatcagt 360
taatatggga ttattaaata ttggctataa aa 392

<210> 1714

<211> 301

<212> DNA

<213> Homo sapiens

<400> 1714

tgggagggat attttccac aggaacaagg gtctccgtga tgacacgggg tctctatagt 60
catgttgaga gcctaattggc ccttggcata attgctgggtg ttggggtaga aggtgtcttg 120
gagtttgctc aagtgggtga gagggagggg ggtgccatag acttgaggga actggcacga 180
agccaaggat acaaattccag gcagggctgt ggggcaggat agggagcagg gccttctact 240
gaaggagtga ctcaggaagg aggaggggaa ggtgacaagc ccctgggcag gagccctgtg 300
g 301

<210> 1715

<211> 194

<212> DNA

<213> Homo sapiens

```

<400> 1715
taaattcagg ctaacttctg aaaatcccgt tttattcacc tcactgtggt accagtaact 60
atactgagtc aggttacttt acagttaact atgtcaccta aaacacaata atccattaac 120
actctaataa cagttattgg gtgtgggtcat actggaaatt ctttaaccata tagttgtcct 180
gccaatTTTT tttt 194

```

```

<210> 1716
<211> 185
<212> DNA
<213> Homo sapiens

```

```

<400> 1716
gtaggaatgg gttcttggtg cacaagatag tattgttgag ctagttttcg agctctgtgc 60
acaagcactc ttttaattccc acggacgggg ctctccagc tacagcagcc aaagcatatt 120
caatctggac aagtttacca gacgggctga atgtagtcag cgaaaaactg taccgcgcgt 180
ccgcc 185

```

```

<210> 1717
<211> 296
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 3
<223> n = A,T,C or G

```

```

<400> 1717
aanaggctct tgggtggagag gactgtgaag ccgtcggcag gtgtgccctc gggtgtgccg 60
tcggcgctgg ctgccttact gacttcaccc tgcttcttct tggatttccg ggcccccttc 120
ttgcctcctg cttttttaga tgcaggcttc ttctgggatg gagacttggc ctttttggtc 180
gggggtggtg tgatgatggc ttccaacttt cctttggatc cccgcttctt cgctagcaac 240
tcgggggtgga tgttgggtaa cacaccccca ctggctatgg tgactccttt tagcag 296

```

```

<210> 1718
<211> 343
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 208, 322, 341
<223> n = A,T,C or G

```

```

<400> 1718
atggcattaa ttgttccttg cttttatagg gtgtattttg tacattttgg atttctttat 60
ataaggtcat agattcttga gctgttgtgg tttttagtgc acttaatat agcttgctta 120
aggcatactt ttaatcaagt agaacaaaaa ctattatcac caggatttat acatacagag 180
attgtagtat ttagtatatg aaatatntg aatacacatc tctgtcagtg tgaaaattca 240
gcggcagtgt gtccatcata ttaaaaatat acaagctaca gttgtccaga tcaactgaatt 300
ggaacttttc tcctgcatgt gnatatatgt caaattgtca ngc 343

```

```

<210> 1719

```

<211> 193
 <212> DNA
 <213> Homo sapiens

<400> 1719
 tcgaggaccc ccgagatgca gaggatgcta tttatggaag aaatgggttat gattatggcc 60
 agtgtcggct tcgtgtggag ttccccagga cttatggagg tcgggggtggg tggccccgtg 120
 gtgggaggaa tgggcctcct acaagaagat ctgatttccg agttcttggt tcaggacttc 180
 ctccgtcagg cag 193

<210> 1720
 <211> 176
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 30, 91, 145, 168, 170
 <223> n = A,T,C or G

<400> 1720
 tgattcagaa ttttttttaa tgaaaggatn attgcactaa ccttcttcct gctgctctga 60
 ttctgcattt gtggtacttg tgactacggt ntttcaaata tagatagatt taagctgcta 120
 attttttttt ttttagtaac cactnctata tcatgtcttt tactctgntn ataata 176

<210> 1721
 <211> 128
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9
 <223> n = A,T,C or G

<400> 1721
 tattcttang aaacttcctt aatcccttgg aaattcccgg gtccttcaag aataaaaaaa 60
 aaaggggtcaa gaagaacaaa ttaccaaagg gaaagaatgg ctttcaatat aataaggtcc 120
 atttttta 128

<210> 1722
 <211> 285
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 34, 140, 165, 170, 230, 255
 <223> n = A,T,C or G

<400> 1722
 ttatgaagtt gacaaataaa taaaaggtag tggntatgtc tgagcttatt gtgtttgagc 60
 taacaccagg ttactcagta accatgacct gtcctccat ttccatttat tctcaacatt 120
 aaatagtttt atcttggtgn tgccagaaat gcacttggtc caggcnattgn ccctgctgta 180

```

tgaaaagctt cttggcaatg aattctgtaa taagtgcctt acattatggn tttctggtgg 240
aattggttta acagngacaa cccaggattt ccaatatatt tttgt 285

```

```

<210> 1723
<211> 536
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 33, 66, 67, 68, 406, 437, 450, 462, 498, 515, 516
<223> n = A,T,C or G

```

```

<400> 1723
cttggcttgc aggtggcacc ttctcactat gtctcactat ggcttttct ctgtggagag 60
ggacannnag catgagcagg ctctggtgtc tcctcttctt ataaagacac taatatcacc 120
atattagggc ttaaacctat gacctcattt aaccttaacc ccttaaagggt cccatctcca 180
aaaacagtca catagcaggc tactgcttca acatatgcat ttgggggagg ggacaccatt 240
cagttcttaa caggggtgtc accgcaaaca tggaaagtca gagccttctc cccttcagaa 300
ttcccgcgcc caccagggga tggggaagag gagcagagag gtatgggaag cagacacgga 360
gagtggcagg taccatgctg ggggtgggctc aggagtgtt tcgganggac atatggaact 420
ggcagggctc aatgcangga gggcggaagn ccttgggaag ancccgtggc ctgagaaagg 480
ggctgggcta caaccctngg caagttactt tacnntgac cttcgatgct tttggg 536

```

```

<210> 1724
<211> 145
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 4, 12, 27, 32, 45, 47, 48, 59, 61, 65, 93, 98, 103, 121
<223> n = A,T,C or G

```

```

<400> 1724
ctgncctttt gnaacaggac cctcacncta tncaatgggg ggttnanntg aagcatganc 60
ntatncatgc ggaaaacca actcatgtga gcncaaancg gancgacca gacaaccatg 120
natgagggcta atatggggag agaaa 145

```

```

<210> 1725
<211> 173
<212> DNA
<213> Homo sapiens

```

```

<400> 1725
caattctgga attaccact tgtttaattt tgagcaacat gatctagcat taatgtagtc 60
acattctaaa tcagacaatg taattatgaa gtagaccgag aggaagatga gcgcgcaaca 120
atcgaggaga gagaagacga acaccaccgc ctccatctc ctctccgct gcc 173

```

```

<210> 1726
<211> 302
<212> DNA
<213> Homo sapiens

```

```

<400> 1726
acccgttgga aatgggccat ggtctaattt ggtgttgaaa taaactaacc tctttggctg 60
tttctcccaa actgccacca gccaggcaag gccaatccaa tactgactgc tggctggggg 120
agctcgtaat gggatgatgcc gccctgcttt ttgcatatgt caggctaaca ggtgctttat 180
ttccagagaa ttgttaatgc ccttttttga aaagagcagc agaaattccg gacaagaatc 240
tgaaaaatag gtgtcaaaaa ctatttccca gaaggtagct gtacaggagt ttgagtctcc 300
ag                                                                 302

```

```

<210> 1727
<211> 274
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 3, 4
<223> n = A,T,C or G

```

```

<400> 1727
ttngtttgaa aaaatagatc caatcagttt ataccctagt tagtgttttg cctcacctaa 60
taggctggga gactgaagac tcagcccggtg tggggctgca gaaaaatgat tggccccagt 120
ccccttggtt gtcccttcta caggcatgag gaatctggga ggccctgaga cagggtattgt 180
gcttcattcc aatctattgc ttcacatgag ccttatgagg cagggtgagag atgtttgaat 240
tttctcttc ctttttagtat tcttagttct tcag                                                                 274

```

```

<210> 1728
<211> 415
<212> DNA
<213> Homo sapiens

```

```

<400> 1728
aaatcccttt ctgcttccac tggaggcaaa actgaacaaa atgttagtta aatagagaga 60
gcagcatttc taagaaatct gtggctcagca ttatagacca tctatgctac aaggatgtca 120
ttaaatagga tttgttcaat tactggattc ttcttctatg atcagttata gaatttctgg 180
tttataatctc tgattcataa aactgggact ccactttttg aagatacatc tgattgattt 240
ttttcagtca tgatttaaca gacttctttg agatgctcat ttaacattt acataattta 300
taatcccaaa tgtataaaaag acaatgaaaa aagcatcata aataaataat gcaaaatgaa 360
atagttatgt cagacttttg gaccttctga taaattagca aaactgtaac agaaa     415

```

```

<210> 1729
<211> 309
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 4
<223> n = A,T,C or G

```

```

<400> 1729
acanaccgta tacttttatgc aaacaaagtg atgcctcact gacttaggag acaagtcaca 60
tgccatcagt gtgtcagaaa atttctttct tcagtgatag ttaaggtaac ctgccagct 120
actttccaga gacagctcca gggcaatact ggggaaaaaa aaatcagaga cataggaccc 180
caatagagcc ctgtgcaaca aaaagatgct agataacaaa actcaaagca aaactaagat 240

```

```
cattccaatt taggggaaag tttttttatt cagtgtttta gattaaaaac tacaagattt 300
tgcttgacag                                     309
```

```
<210> 1730
<211> 285
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 2
<223> n = A,T,C or G
```

```
<400> 1730
anctgtactg tatttatgtt gctattggctc aaaagagatc cactggtgcc cagttggtga 60
agagacttac agatgcagat gccatgaagt acaccattgt ggtgtcggct acggcctcgg 120
atgctgcccc acttcagtac ctggctcctt actctggctg ctccatggga gagtatttta 180
gagacaatgg caaacatgct ttgatcatct atgacgactt atccaaacag gctggtgctt 240
accgtcagat gtctctgttg ctccgccgac cccctggctg tgagg                               285
```

```
<210> 1731
<211> 244
<212> DNA
<213> Homo sapiens
```

```
<400> 1731
cattaccttg ctaaaatttc cactaagcta cagcttcaga tatttacaag aaaaataaat 60
atcttttaac agacttcaat gtggtttaac agcaagctag ctgaggagtt gtattttggt 120
gttatttcag gtaacttttt attaagaaac agttaatatt tcagcgatta caatttcagg 180
tgttcaaaac tcaagaaggg tcatcattat actctgaagc agaattcttc aggtactcat 240
cttt                               244
```

```
<210> 1732
<211> 272
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 9, 65, 192, 210, 212
<223> n = A,T,C or G
```

```
<400> 1732
ctgggaagnc agttcgttct ctctctctct ctcttcttgt ttgaacatgg tgcggactaa 60
agcanacagt gttccaggca cttacagaaa agtgggtggc gtcgagccc ccagaaaggt 120
gcttggttct tccacctctg ccactaattc gacatcagtt tcatcggagg aaagctgaaa 180
ataaatatgc angagggaac cccgtttgcn tncgcccaac tcccaagtgg caaaaaggaa 240
ttggagaatt ctttatgttg tcccctaaag at                               272
```

```
<210> 1733
<211> 388
<212> DNA
<213> Homo sapiens
```


<220>
 <221> misc_feature
 <222> 2
 <223> n = A,T,C or G

<400> 1733
 anttggaga gcatatgaac acgggccagc tagcaggatt ttcacatcaa attagaagtc 60
 tgattttgaa taatatcatc aataagaagg agtttgggat tttggcaaag accaaatact 120
 ttcaaatggt gaagatgcat gcgatgaata ccaacaatat cactgagcta gtgaactatt 180
 tggcaaatga cttaagttaa gatgaagctt cagtcttgat aactgaatat tcaaagcact 240
 gcgggaaacc tgtgcctcca gacactgctc cctgtgaaat tctgaagatg tttcttagtg 300
 gattatcgta aatcactgaa cctttttttc aagaaggaca agaattttgg agtctgctat 360
 taatgggacc atatttatta cagttttt 388

<210> 1734
 <211> 282
 <212> DNA
 <213> Homo sapiens

<400> 1734
 tttggaatgt aaaattaatg gtatctggta tcaagttgta agaaaaactc ccccagattg 60
 ggaggttaact gagtgatatg tgaaagaatc ttcccgtctg aatttaagaa tacacctaca 120
 ctgggcagaa aaagtgggg gagaggaagt agaagtagag gaaaagcaca actccactgg 180
 cttcaatcaa actgaggtaa ctaattagag acggaaaata aataaatcaa caaatgcccc 240
 atttttgttt tccaaaaaag atcactggca actaacaatt tt 282

<210> 1735
 <211> 268
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1
 <223> n = A,T,C or G

<400> 1735
 ntaagccagc cttcctcaag aatgccagac agtggacaga gaagcatgca agacagaaac 60
 aaaaggctga tgaggaagag atgcttgata atctaccaga ggctggtgac tccagagtac 120
 acaactcaac acagaaaagg aaggccagtc agctagtagg catagaaaag aaatttcac 180
 ctgatgttta ggggacttgt cctggttcat cttagttaat gtgttctttg ccaaggtgat 240
 ctaagttgcc taccttgaat tttttttt 268

<210> 1736
 <211> 478
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 2
 <223> n = A,T,C or G

<400> 1736

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```
<210> 1737
<211> 489
<212> DNA
<213> Homo sapiens
```

<400> 1737						
ctttnaggat	ggcgcagtagc	agcgggctcca	aggctgaatt	cattgtcggg	gggaaatata	60
aactggtacg	gaagatcggg	tctggctcct	tccggggacat	ctatttggcg	atcaacatca	120
ccaacggcga	ggaagtggca	gtgaagctag	aatctcagaa	ggccaggcat	ccccagttgc	180
tgtacgagag	caagctctat	aagattcttc	aagggtgggg	tggcatcccc	cacatacggg	240
ggtatggtca	ggaaaaagac	tacaatgtac	tagtcatgga	tcttctggga	cctagcctcg	300
aagacctctt	caatttctgt	tcaagaaggt	tcacaatgaa	aactgtactt	atgttagctg	360
accagatgat	cagtagaatt	gaatatgtgc	atacaaagaa	ttttatacac	agagacatta	420
aaccagataa	cttcctaattg	ggtattgggc	gtcactgtaa	taagttattc	cttattgatt	480
ttggttttg						489

<400>	1738					
gttacagatg	acatgtatgc	agaacagacg	gaaaatccag	agaatccatt	gagatgtccc	60
atcaagctct	atgattttcta	cctcttcaaa	tgccccccaga	gtgtgaaagg	ccggaatgac	120
acctttttacc	tgacacctga	gccagtggtg	gcccccaaca	gcccaatctg	gtactcagtc	180
cagcctatca	gcagagagca	gatgggacaa	atgctgacac	ggatcctggt	gataagagaa	240
attcagagg	ccatgcgagt	gg				262

```
<400> 1739
ccaccatcct tttgagacag ttcctatcaa caatcttgaa ccatacta at 60
ttcctgaagt ccttttggtg tagctcataa taaaataagc aatacaaatg aattatctgt 120
atttaaggga aaagaaacat ttacaagaaa acacaaaaat ataactgtta taattcatta 180
tgaataaata tacactttga actggctaag tacaatcttt atacattggt taagatttaa 240
tacagtttat tagccatttt cttttttcac acaatgtata tcaaaattaa aaaaaaatac 300
tqatttataq aaaaatggca aagtacagta gttccattcc aatttgaagg gccatgaaaa 360
```

```
gccactgcaa gaccttttag cctaattcaa aactgtaaac atgttcagtc ttttttacct 420
gc 422
```

```
<210> 1740
<211> 92
<212> DNA
<213> Homo sapiens
```

```
<400> 1740
gctaaatacc tatctaattgt gctatgttta tcaaatacgtg tactaaaatg gaaagctagt 60
tttgagaaaat tattcagaag ccttggttatt tt 92
```

```
<210> 1741
<211> 188
<212> DNA
<213> Homo sapiens
```

```
<400> 1741
tttcaattct tccaaaaggc tcaaagatcc cacgaagcat atcttcagtt atgttgaagt 60
gtaatgagcc cacataaagc ctcataaggc cagcacttcc cttttgtaaa ttgtttgcca 120
ttgctgcagc tctgtttttt tctgcctgtg atgcctgtac tatgattggc acgcctaaaa 180
ctcgttgg 188
```

```
<210> 1742
<211> 285
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 3
<223> n = A,T,C or G
```

```
<400> 1742
ttnaaaatac tttcaggctc caccaaaaacg tagaactgaa agcatgtatt ttggaagaaa 60
gagatacatt ttgtatgctt tcttttcctt ttgtagattc ccagtttatt ttctaagact 120
gcaaagatca ctttgtcacc agccctggga cctgagacca aggggggtgtc ttgtggggcag 180
tgaggggggtg aggagaggct ggcattgaggc tcagtcattc cagtgaagctc caaagagggg 240
ccacctgttc tcaaaagcat gttggggacc aggaggtaaa actgg 285
```

```
<210> 1743
<211> 117
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 2
<223> n = A,T,C or G
```

```
<400> 1743
angatctata gacacttttag gcaaaacagg ctcataaagc aattaataaaa tcaacaattt 60
agtaaaaaaca ggctacatag tattttgttt ttacgtttca tttgtctatt gatcttt 117
```

<210> 1744
 <211> 111
 <212> DNA
 <213> Homo sapiens

<400> 1744
 aaacaatggg ctaaaaaataa acagtattaa aagggttaagt ttatataata catatgtaca 60
 caattagtgg tgttttcttt tcagacaaaa tactgaaaca aatattagtt t 111

<210> 1745
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 1745
 ctgccagtag acccccggtc accctgaggc tgggtggtccc tgctagtcag tgtggctctc 60
 tcattggaaa aggtggatgc aagatcaagg aaatacgaga gactacaggg gctcaggtcc 120
 aggtggcagg ggatattgcta cccaactcaa ctgagcgggc catcactatt gctggcattc 180
 cacaatccat cattgagtgt gtcaaacaga tctgcgtggg catgttggag tcccccccga 240
 agggcgcgac catcccgtac cggcccaagc cgtccagctc tccggtcatc tttgcagggtg 300
 gtcag 305

<210> 1746
 <211> 319
 <212> DNA
 <213> Homo sapiens

<400> 1746
 aaaataagtg aataagcgat atttattatc tgcaagggtt ttttgtgtgt gtttttgttt 60
 ttattttcaa tatgcaagtt aggcttaatt tttttatcta atgatcatca tgaaatgaat 120
 aagagggctt aagaatttgt ccatttgcat tcggaaaaga atgaccagca aaagggtttac 180
 taatacctct ccctttgggg atttaatgtc tgggtgctgcc gcctgagttt caagaattaa 240
 agctgcaaga ggactccagg agcaaaagaa acacaatata gaggggttga gttgttagca 300
 atttcattca aaatgccaa 319

<210> 1747
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 1747
 aaatcctttt cccataaata aaagtacagt tttcttggtg gcagaatgaa aatcagcaac 60
 ttctagcata tagactatat aatcagattg acagcatata gaatatatta tcagacaaga 120
 tgaggaggta caaaagttac tattgctcat aatgacttac aggctaaaat tagtttt 177

<210> 1748
 <211> 237
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9, 12, 15, 25, 172, 225
 <223> n = A,T,C or G

<400> 1748

```
ctgaaggant gnaantagac tggtnagagag aggaaggcac tgagccacat gaaggatatgt 60
acgtaggttt tgttcagtgg aaatagactg gtagagagag gaaggcactg aaccacatga 120
aggtatgtgt gtaggttttg ttcagtggaa atagactggg agagagagga angcattgaa 180
tcacatgaag gtacgtgtgt aggttttgtt cactgacttc ttcantgtct cagccag 237
```

<210> 1749

<211> 244

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 87

<223> n = A,T,C or G

<400> 1749

```
aaaaggcccc attatctgac aaaatagatg gtgaacatgc actatcccag gatattctatt 60
attatccaaa gaagtgtttc tcaaagngtg gtccatggta ctgggtccatg aattgggttg 120
taccagtcaa tgaagagata aattacttgc atcagagtgt aaatcaatac attgcttttag 180
ctattaataa aatttttgcta aaaaatcaaa tcctgtcatt gacctaaaaa gtatctctag 240
attt 244
```

<210> 1750

<211> 289

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 247

<223> n = A,T,C or G

<400> 1750

```
aggccagcct ccaccacgca cggcgaaaagg agtgaactag ctgggacaca cacacgtgtg 60
aatgcatgca agcattcact gcatcttctc cgtggactcc ctaccgctct tccatagccc 120
cccctttcag cctcactgtt tctcgtgtga gcctatctgc ttgggcagtc cactcgggag 180
ggggtcatgg agccaggact ccctctaaat aggaatggaa aggaccctgc agatattttt 240
atcctanttg tgaaaacaag gtgcctctga ttctctatat ccatcacag 289
```

<210> 1751

<211> 594

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 558

<223> n = A,T,C or G

<400> 1751

```
ctggttatta atcacaagtc ctggaaatgg tctaatagacc gtgaatttga taaactcggc 60
agagtctaag atccttctca tggagctgat ttccaggtag ctgggggctt tgaaggacac 120
```

```

ccccgggggc atgccatcaa ccaccacaca gccagggtta attgtgattt tcctgtaggg 180
aactttcaca ggaaaaccca taccaatagc ttcaccaa atccgactaa agaggtcatt 240
cacttggttct cttagctgtc tagctttttc aactttcgag agtctttcat tatcatcatc 300
tggaattgtc acctgaatga tgttaagggtc ttcaacacct gatgcagtag tattaacatt 360
gggtgatgaa tttatttttc tgggaggggtc cttagaggag gtgctctcct taatcgccgt 420
ctcaaacatt tcgggctttt taatgatgaa ctttaattttg gctttgtttc tgagtatctt 480
ctccagcctc ggaatgccaa aagtcgatgg tcttcggaat ggcacaccct caggtaagcc 540
ttccacataa aagtcttncg ggaaagactc aaataacgcg aacggcacct tcac 594

```

<210> 1752

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1752

```

ctgaagggtt catggctccc aaggcttggc cgtgctgac agaatactac aaatccttgg 60
agaaagctta ggctgttaac ccagtcactc cacttttgac acattactag taacaagagg 120
ggaccacata gtctctgttg gcatttcttt gtggtgtctg tctggacatg cttcctaaaa 180
acagaccatt ttccttaact tgcatacgtt ttggtctgcc ttatgagttc tgttttgaac 240
aagtgttaac cactgatggg tttaatgtat cttttccact tattatagtt atattcctac 300
aatacaattt t 311

```

<210> 1753

<211> 587

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 552, 561

<223> n = A,T,C or G

<400> 1753

```

ctgtccatta tacaccgtca cgttgatccc tgcctccagc aactcgcca caatgctaata 60
gactggcttc atgaagtcct cctccatggt cacaaagacg ttggtagcct ggcctcccca 120
ggattgatcc tcaggaataa ttttgagctt ctttctgatg gggccattca tgagctggct 180
taaggcatct cgttgtaggt gtctcacgtg gcgctgacaa agacaaacta ggtggctctg 240
tgtgaattct agactcgact ccattgtaga cgtgggagtg cttttagtta agatgttata 300
gaagttcacc ccactctgtg tctgttcaat gatcatttct gctttccccc acagctctgt 360
ggcctctctg tagagcccct tatttacggc attcagtact tgctctgcaa ccttagacac 420
ctctgccaga cttttgtctt cgagaagaga catgctgtac aggtaagggtc cccaggagag 480
caccgaatca acagggggaga tccaggaatc acccaaggca acccccgcaa agttgcactt 540
gatgggtccct cncatgaatgg ncttataaag ctctagacca atgccag 587

```

<210> 1754

<211> 564

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 409

<223> n = A,T,C or G

<400> 1754							
cctctctcct	tggcttgacag	gtggcacctt	ctcactatgt	cctcacatgg	ccttttctct		60
gtggagaggg	acagagagca	tgagcaggct	ctggtgtctc	ctcttcttat	aaagacacta		120
atatcaccat	attagggctt	aaacctatga	cctcatttaa	ccttaacccc	ttaaagggtcc		180
catctccaaa	aacagtcaca	tagcagggcta	ctgcttcaac	atatgcattt	gggggagggg		240
acaccattca	gttcttaaca	gggtggtcac	cgaaacatg	gaaagtcaga	gccttctccc		300
cttcagaatt	cccgcccca	cccagggatg	gggaagagga	gcagagaggt	atgggaagca		360
gacacggaga	gtggcaggtg	ccatgctggg	gtggctcagg	agtgtctcng	aggacatatg		420
gaactggcag	ggctcagtcg	agggaggcgg	aggccctggg	agagccgtgt	cctgagaagg		480
gcctgggcta	caaccctggg	caagttaatt	cacctctgag	cctccgatgc	tctgtgaaat		540
ggaaggaatg	tgcttgcttg	tcaag					564

<211> 214

<213> Homo sapiens

```

aaatgtgatg  ttttgagcat  caaaaagcta  ctatctaaaa  ggattagtct  cccagtgttc  60
ttggtaaatg  gggaaggtta  ggaaggaggc  aatgatccaa  tgaatataga  agaactggcc  120
gattcacagg  aaacttgctt  tggataaggt  gagtcaatgg  gtgatattgt  gcaggcaggg  180
agggaaattt  ctttgtacaa  attcatgtcc  ctgg                                     214

```

<211> 225

<212> DNA

<213> Homo sapiens

 $\langle 220 \rangle$

<221> misc feature

<222> 8, 9, 40, 41, 76, 88, 89, 91, 100, 143, 181, 188, 197, 201, 202, 217

<223> n = A, T, C or G

<400> 1756

```

aaaattanna   catacatggt   caggcagctt   ctgtccatan   ntaaactatt   ccttttcagt   60
ctgagtaata   tgcggn ttgt   tcttaatnnc   ncacattaan   aattttattta   gattggtgaa   120
actatcttta   taaaaaaaaa   atncgaacat   gaatgcaaac   ttaccaaaca   gagcccacta   180
nattgatnaa   gttaatncca   nnatagtttg   ccatganctg   ggtgg                225

```

<210> 1757

<211> 282

<212> DNA

<213> Homo sapiens

<400> 1757

ttgcagcctg	cgatgacaca	gcgaatctat	gacaagttta	tagctcagtt	gcagacatct	60
atccggggag	aaatctctga	catcaaagag	gaggggaacc	tagaagctgt	cttgaatgcc	120
ttggcataaaa	ttgtggaaga	aggcaaagtc	cgcaaagagc	cagcctggcg	ccccagcggg	180
atccccagaga	aggatctgca	cagtgttatg	gcaccctact	tcctgcagca	acgggacacc	240
ctcgcgcgcc	atgtgcagaa	acagggaagcc	gagaaccagc	ag		282

<210> 1758

<211> 473

<212> DNA

<213> Homo sapiens

<400> 1758

```

ctgaaacagc ttttcaagct ctctctcctc gtcaaggatc atgagaggca ctccactcaa 60
ggggaggtgc gcaatctggt gctcttcagg cagggtcaaaa ctctcaaagt ctagaggatt 120
gaagggaaaag aatttttcta tttctggata ggcattcatc gaggcaggaa cagagctttt 180
tgctttaaca gtcttctcag tcattctttt ggcaaaaag cttggctgtt tttgtttgag 240
gggtcccttg gtctttacag acttttctgt agctctgttg acagttccca aagcctttct 300
agtagcttta ggtaaggctg gtggggcatc gaacgttttg ccaaaacgtg gtgttgaaac 360
ttgagatctc ccattctaagg ctttgattga aggtccagac cccagcttca gcccatcctt 420
agcaaccaca cgggtgcctg gttctccatt ttccttatcg acatagatca gag 473

```

<210> 1759

<211> 187

<212> DNA

<213> Homo sapiens

<400> 1759

```

aaacttcgcc atgatcgtgt cttctgcact catgatatgg aaaggcttga tcgtgctcac 60
aggcagttag agcccatcgc tgggtggtgc gagtggcagt atggagccgg cctttcacag 120
aggagacctc ctgttccctc caaatttccg ggaagacca atcagagctg gtgaaatagt 180
tgttttt 187

```

<210> 1760

<211> 564

<212> DNA

<213> Homo sapiens

<400> 1760

```

cctctctcct tggcttgacg gtggcacctt ctactatgt cctcacacgg ccttttctct 60
gtggagaggg acagagagca tgagcaggct ctggtgtctc ctcttcttat aaagacacta 120
atatcaccat attagggtt aaacctatga cctcatttta ccttaacccc ttaaagggtcc 180
catctccaaa aacagtcaca tagcaggcta ctgcttcaac atatgcattt gggggagggg 240
acaccattca gttcttaaca ggggtgtcac cgcaaacatg gaaagtcaga gccttctccc 300
cttcagaatt cccgccccca cccagggtat ggggaagagga gcagagaggt atgggaagca 360
gacacggaga gtggcaggta ccatgctggg gtggctcagg agtgcttcgg aggacatatg 420
gaactggcag ggctcagtgc agggaggcgg aggccctggg agagccgtgt cctgagaagg 480
gcttgggcta caacctggg caagttactt cacctctgag cctccgatgc tctgtgaaat 540
ggaaggaatg tgcttgcctg tcag 564

```

<210> 1761

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1761

```

ctgtcttctc atctatctta gcataggagt cctctgctgc cttttcaata ccgtcgtggt 60
atttctccaa agcagttttc aagtttagaa atatttcctg ggacttcagt ttctcccttt 120
cagcagcatc ttttagttgt tgaattccaa gtttaatttt ttggatttct tgattaattg 180
tggttactcg ttcataagaca gcacctcttt tttcttgaac ttatttgcaa tcctcaatta 240
ctgtgcgttt gtattgctta acatcttcat gcttcttatt tattttgaat tgtgctgtgg 300
caagtttttc cttcttcaca atcatcagtc ttttgaacga attttcttca gtcttcaatt 360
tcttcagttc tgactcatca ctctcaattt ggtcctccaa gttcaggctt ctg 413

```


<210> 1762
 <211> 315
 <212> DNA
 <213> Homo sapiens

<400> 1762
 ggaaaagaaa gagctgaaaa tgcagaaagc cgaagagtta gaacttttgg atacaggaga 60
 agaaacagcg gctccactac agaccagcc ccagggttcaa tgtcctccga agaatgaagt 120
 ctttccctgg tgatgggtccc ctgccctgtc tttccagcat ccactctccc ttgtcctcct 180
 gggggcatat ctcatgcagg cagcggcttc ctgatgatgg tcgttggggg ggttgtcatg 240
 tgatgggtcc cctccaggtt actaaagggt gcatgtcccc tgcttgaaca ctgaagggca 300
 ggtggtgggc catgg 315

<210> 1763
 <211> 114
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 16
 <223> n = A,T,C or G

<400> 1763
 cgaccgccta agagtngcgc tgtaagaagc aacaacctct cctcttcgtc tccgccatca 60
 gctcggcagt cgcgaagcag caaccatgcg tgagtgcac tccatccacg ttgg 114

<210> 1764
 <211> 114
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 25, 33, 38, 53, 62, 71, 81, 83, 93, 102
 <223> n = A,T,C or G

<400> 1764
 ctaatacgac tcactatacg gctcnagcgg cctccgngc cgggggctgc tcnggttaga 60
 tngacatgaa naccctacag ntncactgt ggnaattgaa antatccctc atgt 114

<210> 1765
 <211> 485
 <212> DNA
 <213> Homo sapiens

<400> 1765
 aaacagtaac aaaacagaaa gcaagaatca ctgaacactg ggtgcagtc gttctaagtc 60
 cttataataa ttgccaaaat tatttgaatg attcttcaag attaggctga tccctggcta 120
 aggtctgtgt aaggcagaca agcgttattg atcatatcaa gttccctaca atatcctgtc 180
 ctcaaaaccg gaagcaatga acatgatect cttcggttgg ataaatgaac ttctgtttg 240
 gcctgcttct aggccctgcc agattctcat aacatcatat acgtaagtat agttcctcaa 300
 agtgactgac atttatttta attttgcttt gttttttttt attttctccc ccattccttt 360

```

atTTTgtgtt attcctgact cacttgacac tctctgatgc ctgagagatt cctgttttggg 420
atttaatatc cagggtctgtg ttacagtaa aaaaagcagg cagtcctttt tagtttttcc 480
ttttt 485

```

```

<210> 1766
<211> 389
<212> DNA
<213> Homo sapiens

```

```

<400> 1766
aaaaacaaag tcttcaactt ggggtgttgag attggcaaaa ggggaagcaa gggaaaagcc 60
aaggaaagat aaaatattca gaagaaagtc aaagttatct gcaattacat gttagaacag 120
atTTTgcagg ttaaaaagat gttgcttaaa tatattcata aacctgttgt aagattttca 180
cttatgcagt ttcagaaaaa ttagctgctt aacatatgac agaactgtat ttaacaaat 240
gacattaaaa gtcaggagag ctactcagtt aattgataaa gtagaggcaa cgtgggggag 300
ccctcccccac gtttattgaa gatttgtggc tccccagcc ccgtttgcct gcacaggct 360
aacaacctca ttcctcccat agagcctgg 389

```

```

<210> 1767
<211> 176
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 16, 20, 21, 35, 119, 125, 133, 142, 165, 169, 176
<223> n = A,T,C or G

```

```

<400> 1767
TTTTTcaacg attaanaatn ntcattacat aactnggtga aactgaaaaa gtatatcata 60
tggttacaca aggtattttg ccagcgtata ttaatatTTT agaaaatatt ccttttTgna 120
tactnaatat cancatagag cnagaatcat attatcatat ttatnatant gttcan 176

```

```

<210> 1768
<211> 384
<212> DNA
<213> Homo sapiens

```

```

<400> 1768
aaaagaaatc atggtacttc ttagagcaat ttgcaaaaagg ggaaaaaagt cttaggctca 60
ctccttggaataaaatatca agtaaccata aaaatattca gccatttttc agttattcgg 120
ggagttcagg catggtccca cgcagagcat cagagttcct ctttgaaata acccagcttt 180
gccaatgaca tctcttttct caactgcata acctccaaa acatctgata aacatcctgc 240
tgtttcacaa gtccctgctg aatgtatcga atgtatgtaa aaaagttaca tacagaagtg 300
atcctgtatc tgcaaaaagg agaaatacaa taatagtTgc ttgagtcCCC taattttaatt 360
ctgtgtttac aggacttact ctgg 384

```

```

<210> 1769
<211> 111
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```

1766-1769
 Homo sapiens
 DNA
 misc_feature

<222> 91
 <223> n = A,T,C or G

<400> 1769
 aaatataaaa aattaaaaagt taaaactcta gcccttcagt gaaggagacg taaaatggcg 60
 tgggtaacaa caactaccaa aaaaaaaaaa naaaaaaaaa aaaaaaaaaa a 111

<210> 1770
 <211> 225
 <212> DNA
 <213> Homo sapiens

<400> 1770
 ctggctgaag gggccgtgga gctcccgcca gccacgatt agctgggcct tcttcggggc 60
 aatgcgctga agactgcgga gatctcgggc tgagccttcg ttcagcagat ccagtatttt 120
 ttggcgccca tgagccagta gctccgggct gatctgtagc tcccagcagt cctcagcctt 180
 ctctcaggc tctagggcat ccagggactc cagctttctc ttccg 225

<210> 1771
 <211> 223
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 39
 <223> n = A,T,C or G

<400> 1771
 ggccaagtaa aagctttatt tttttaaatg aaaactacna aaggcggggt gggttgtggc 60
 gggggcaagt tgtggccctg taggaccttc ggtgactgat gatctaagtt tccggagggt 120
 tctcagagcc tctctgggtc tttcaatcgg ggatgtctga gggaccttcc gcggcatcta 180
 tgcgggcatg gttactgcct ctggtgcccc ccgcagccgc gcg 223

<210> 1772
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 1772
 ccaagtctac aatgtcccaa tatcaaggac aaccacccta gcttcttagt gaagacaatg 60
 tacagttatc cattagatca agactacacg gtctatgagc aataatgtga tttctggaca 120
 ttgccatgt ataatcctca ctgatgattt caagctaaag caaaccacct tatacagaga 180
 tctagaatct ctttatgttc tccagaggaa ggtggaagaa accatgggca ggagtaggaa 240
 ttgagtgata aacaattggg ctaatgaaga aaacttctct tattgttcag ttcattcaga 300
 ttataacttc aatgggacac tttagaccat tagacaattg aacttgattt aaacaaattc 360
 acataatgcc aaatacacia tgtatttata gcaacgtata atttgcaaag atggacttt 419

<210> 1773
 <211> 172
 <212> DNA
 <213> Homo sapiens

<220>

```
<400> 1776
aaagtttcac ttccctagca aaatatcttc agtcaagaaa ttagtctttg aaaattatga 60
aaattgttgt gggaaatatt tatacaaatt attactgata atgcacatat attttgaaac 120
attgtttcta gaagcaataa aatataacct atttaggaga taacccaaat gatttgtaaa 180
aaaattaact tgtagaaaag ggaaggatgt tgtgtaaaat caagtcaatt atttgagggt 240
tttataatat tgagtactta tgtactaagt cacacccagc cagtcaataa ctgagaaatc 300
aaaaataaat aataattttca aagaatttaca taataacagg gccttttgag atttttggca 360
attgttaaac aaaaacgaatg gttttttaca ttcbagtgtaa ttctacgaat attttatttg 420
caccatgttt aggcactgaq gctacacagc agtqaaataa q 461
```

<210> 1777
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1777
 ccaagttctg ctggaggagc actcaagtgt gacgagcagg gccactggac cctgcagggc 60
 tgtggtgtat atagtgcagc tttggagggtg gaactctatt ttcacacttt tctatggagc 120
 cttccgagtc ccagggtttc acttgaggct gtctgtcttg atggcgggtt tcagacctcc 180
 attaacatcc ctaccagca ttctgtactt cgggggcctt ctctcttggt ataaaacttt 240
 ttaccaagtg aaacatcgat accacctttg tttccattct cactgggtgta aatactgagt 300
 actaactgag aattttgact ttgcattctg tcggaatact tgtgttcaat aaaaattgaa 360
 agaaaaaa 368

<210> 1778
 <211> 554
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 211, 416, 499, 518
 <223> n = A,T,C or G

<400> 1778
 cagttatgcg aaaacatggc tgcggccggt ttggcccttc tttgtaggag agtttcatcc 60
 gccctgaaat cttcccgatc gtttaataact cctcagggtcc ctgcctgcac aggggtttttt 120
 cttagtttgt tgcctaagag tacaccaaata gtgacatcct ttcaccaata tagattactt 180
 cataccacat tgtcaaggaa aggactagaa naattttttg atgacccaaa aaactggggg 240
 caagaaaaag taaaatctgg agcagcatgg acctgtcagc aactaaggaa caaaagtaat 300
 gaagatttac acaaactttg gtatgtctta ctgaaagaaa gaaacatgct tctaacccta 360
 gagcaggagg ccaagcggca gagattgcc aatgccaagtc cagagcgggt agatanggt 420
 gtagattcca tggatgcatt agataaagtg gtccaggga agagaagatg ccctaaggct 480
 tcttcagact ggtcaagana gagctagacc tgggtgctntg gagaaagaag acatcttttg 540
 aaagaatcat ctgg 554

<210> 1779
 <211> 379
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 42, 378
 <223> n = A,T,C or G

<400> 1779
 gtcttggtcg ggcatgacaa ccgcgtcagc tgccctggcg tnactgacga tggcatggct 60
 gtggcgacag ggtcctggga tagcttcctc aagatctgga actaacgcca gtagcatgtg 120
 gatgccatgg agactggaag accattccaa cttggacgcg ttaccatgag agcatatcct 180
 atccaaccgt actaacgtgg acaccctaca cctcccctca gaacttcaaa agggcaagat 240
 cttttttcct tcaattattg ctgagaccaa gagcacaatt cccattgaga gaaagatctc 300
 tgtgctgtaa actaaaacaa attgtgcatt ccttccgggg ccatcgtctt tgtcttcttt 360

tttgtcttga atgaattnt

379

<210> 1780

<211> 222

<212> DNA

<213> Homo sapiens

<400> 1780

ctggtaattg cagaatccac ttgacctgtg taagtgaata atatagactg ttatcttgtt 60
ggccctatga aattctgcac ttttcattat atactctacc ttcattaatt acttctggca 120
agatgttctg ccttagcact cagttgcatt cttttccttt ttcttctctg tcattatgct 180
ttaattctga ggaccatatg agggtagaat atattatctt tt 222

<210> 1781

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1781

ctgctggagc aagccctgcg gaagcacaac gtggctgagc cgtgttccat caaagtcctt 60
gacaaggcta cggtaccaat aataaagctc acagatcagg agactgaagt gaaagttgac 120
atcagcttta acatggagac gggcgctccg gcagcggagt tcatcaagaa ttacatgaag 180
aaatattcat tgetgcctta cttgatttta gtattgaaac agttccttct gcagagggac 240
ctgaatgaag tttttacagg tggaattagc tcatacagcc taattttaat gg 292

<210> 1782

<211> 381

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 132

<223> n = A,T,C or G

<400> 1782

aaaacctgga cttttctgga agggcagcat ataaaaacat cagtcccgag gaggggacaa 60
caatactacc tcactactac atctgtgatg actggttgtt caaacacaat ggagtgtgta 120
aggtatatgt tntataattc ataaccatag cctcgatcat caagaaatac tttcgaaatt 180
tcattttcct tcagaatata ttaagagtgc taaattttta actgcctttt tgtcgagtca 240
aactgtggga ttctgatttg tattaaaaatt gtaagctcct cactgggtata ctatcatcct 300
ggaggggtgt tgtatggctg agcaagagag agagagaatg agagagagac tgtgtgtgtg 360
tgtgtgtgtg tgtgtgtgca c 381

<210> 1783

<211> 127

<212> DNA

<213> Homo sapiens

<400> 1783

aaatatctat gtcacagcaa acaggtggca attcaacatc cagggtcgac agaattgcttg 60
aaggagactg caacagattg gattcccatg gtggagaggg catcttcaca ggtgaagggg 120
ggcccag 127

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<210> 1784
 <211> 259
 <212> DNA
 <213> Homo sapiens

<400> 1784
 agcccaatgt tcctgttggt atagactatg tgatacctaa aacaggggtt tactgtaagc 60
 tgtgttcact cttttatata aatgaagaag ttgcaaagaa tactcattgc agcagccttc 120
 ctcatatca gaaattaaag aaatttctga ataaattggc agaagaacgc agacagaaga 180
 aggaaactta agatgtgcaa ggagatttaa tgatttcaa gaaaataatg gttctttgtt 240
 tttaatgtta acctttttt 259

<210> 1785
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 1785
 ctggtacttg acagagagga tggcgctgtc gaccatagtc tcccagagga agcagataaa 60
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 tgtactggcc gcagcaaagg taattctaaa gaagagcaga ggtagaagt caaagaacat 300
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<210> 1786
 <211> 372
 <212> DNA
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<220>
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 <222> 239
 <223> n = A,T,C or G

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 atacagattt gagaaatgat gctaaattta tagttttcag taacttaaaa agctaacatg 180
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<210> 1787
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 <222> 22
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1784
 1785
 1786
 1787

<400> 1787

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<210> 1788

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1788

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<210> 1789

<211> 651

<212> DNA

<213> Homo sapiens

<400> 1789

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<210> 1790

<211> 388

<212> DNA

<213> Homo sapiens

<400> 1790

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 caagatctat cacagccatc ttttggag 388

<210> 1791

<211> 2442

<212> DNA

<213> Homo sapiens

<400> 1791

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<210> 1792

<211> 2279

<212> DNA

<213> Homo sapiens

<400> 1792

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<210> 1793

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 1793

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<210> 1794

<211> 2881

<212> DNA

<213> Homo sapiens

<400> 1794

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<210> 1795
<211> 422
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 295, 378, 390
<223> n = A,T,C or G

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422

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<210> 1796
<211> 797
<212> DNA
<213> Homo sapiens

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<210> 1805

<211> 791

<212> DNA

<213> Homo sapiens

<400> 1805

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<210> 1806

<211> 255

<212> PRT

<213> Homo sapiens

<400> 1806

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 Glu Ala Glu Pro His Thr Glu Pro Glu Glu Gln Val Pro Val Glu Ala
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 Leu His Glu Met Val His Ala Glu His Val Glu Gly Glu Asp Leu Gln
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 Gln Glu Asp Gly Pro Thr Gly Glu Pro Gln Gln Glu Asp Asp Glu Phe
 115 120 125
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 Val Ser His Glu Glu Thr Glu His Ser Tyr His Val Glu Glu Thr Val
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 Asp Thr Asp Asp Val Thr Tyr Gln Val Tyr Glu Glu Gln Ala Val Tyr
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 Glu Pro Leu Glu Asn Glu Gly Ile Glu Ile Thr Glu Val Thr Val Pro
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<210> 1807

<211> 226

<212> PRT

<213> Homo sapiens

<400> 1807

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 Glu Asn Trp Leu Lys Met Leu Cys Arg His Val Ala Asn Thr Ile Cys
 50 55 60
 Lys Ala Asp Ala Glu Asn Leu Ile Tyr Thr Ala Asp Pro Glu Ser Phe
 65 70 75 80
 Glu Val Asn Thr Lys Asp Met Asp Ser Thr Leu Ser Arg Ala Ser Arg
 85 90 95
 Ala Ile Lys Lys Thr Ser Lys Lys Val Thr Arg Ala Phe Ser Phe Ser
 100 105 110

Lys Thr Pro Lys Arg Ala Leu Arg Arg Ala Leu Met Thr Ser His Gly
 115 120 125
 Ser Val Glu Gly Arg Ser Pro Ser Ser Asn Asp Lys His Val Met Ser
 130 135 140
 Arg Leu Ser Ser Thr Ser Ser Leu Ala Ile Thr His Ser Val Ser Thr
 145 150 155 160
 Ser Asn Val Ile Gly Phe Thr Lys His Val Tyr Val Gln Arg Leu Asn
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 Ser Thr Gly Gly Arg Ser Gln Tyr Ser Trp Phe Gln Ser Val Arg His
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 Ser Ala Phe Arg Ala Ser Phe Ser Glu Ile Leu Glu Gly Asn Thr Asp
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 Phe Ser Asn Phe Lys Lys Val Leu Ser Lys Ser Ser Leu Thr Phe Val
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<210> 1808
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 1808
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 Ala Asn Val Glu
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<210> 1809
 <211> 592
 <212> PRT
 <213> Homo sapiens

<400> 1809
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 35 40 45
 Thr Gly Lys Ser Tyr Leu Met Asn Lys Leu Ala Gly Lys Lys Lys Gly
 50 55 60
 Phe Ser Leu Gly Ser Thr Val Gln Ser His Thr Lys Gly Ile Trp Met
 65 70 75 80
 Trp Cys Val Pro His Pro Lys Lys Pro Gly His Ile Leu Val Leu Leu
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 Asp Thr Glu Gly Leu Gly Asp Val Glu Lys Gly Asp Asn Gln Asn Asp
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 Asn Ser Ile Gly Thr Ile Asn Gln Gln Ala Met Asp Gln Leu Tyr Tyr
 130 135 140
 Val Thr Glu Leu Thr His Arg Ile Arg Ser Lys Ser Ser Pro Asp Glu
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 Asn Glu Asn Glu Val Glu Asp Ser Ala Asp Phe Val Ser Phe Phe Pro
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 Asp Phe Val Trp Thr Leu Arg Asp Phe Ser Leu Asp Leu Glu Ala Asp
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 Lys Lys Gly Thr Ser Gln Lys Asp Glu Thr Phe Asn Leu Pro Arg Leu
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 Cys Ile Arg Lys Phe Phe Pro Lys Lys Lys Cys Phe Val Phe Asp Arg
 225 230 235 240
 Pro Val His Arg Arg Lys Leu Ala Gln Leu Glu Lys Leu Gln Asp Glu
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<210> 1810
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 1810
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<210> 1811
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 <212> PRT
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<400> 1811
 Met Arg Gly Ser Glu Leu Pro Leu Val Leu Leu Ala Leu Val Leu Cys
 1 5 10 15
 Leu Ala Pro Arg Gly Arg Ala Val Pro Leu Pro Ala Gly Gly Gly Thr
 20 25 30
 Val Leu Thr Lys Met Tyr Pro Arg Gly Asn His Trp Ala Val Gly His
 35 40 45
 Leu Met Gly Lys Lys Ser Thr Gly Glu Ser Ser Ser Val Ser Glu Arg
 50 55 60
 Gly Ser Leu Lys Gln Gln Leu Arg Glu Tyr Ile Arg Trp Glu Glu Ala
 65 70 75 80
 Ala Arg Asn Leu Leu Gly Leu Ile Glu Ala Lys Glu Asn Arg Asn His
 85 90 95
 Gln Pro Pro Gln Pro Lys Ala Leu Gly Asn Gln Gln Pro Ser Trp Asp
 100 105 110
 Ser Glu Asp Ser Ser Asn Phe Lys Asp Val Gly Ser Lys Gly Lys Val
 115 120 125
 Gly Arg Leu Ser Ala Pro Gly Ser Gln Arg Glu Gly Arg Asn Pro Gln
 130 135 140
 Leu Asn Gln Gln
 145

<210> 1812
 <211> 474

<400>	1812															
Met	Val	Gln	Gln	Thr	Asn	Asn	Ala	Glu	Asn	Thr	Glu	Ala	Leu	Leu	Ala	
1				5					10					15		
Gly	Glu	Ser	Ser	Asp	Ser	Gly	Ala	Gly	Leu	Glu	Leu	Gly	Ile	Ala	Ser	
			20					25					30			
Ser	Pro	Thr	Pro	Gly	Ser	Thr	Ala	Ser	Thr	Gly	Gly	Lys	Ala	Asp	Asp	
		35					40					45				
Pro	Ser	Trp	Cys	Lys	Thr	Pro	Ser	Gly	His	Ile	Lys	Arg	Pro	Met	Asn	
	50					55					60					
Ala	Phe	Met	Val	Trp	Ser	Gln	Ile	Glu	Arg	Arg	Lys	Ile	Met	Glu	Gln	
65					70					75					80	
Ser	Pro	Asp	Met	His	Asn	Ala	Glu	Ile	Ser	Lys	Arg	Leu	Gly	Lys	Arg	
				85					90					95		
Trp	Lys	Leu	Leu	Lys	Asp	Ser	Asp	Lys	Ile	Pro	Phe	Ile	Arg	Glu	Ala	
			100					105					110			
Glu	Arg	Leu	Arg	Leu	Lys	His	Met	Ala	Asp	Tyr	Pro	Asp	Tyr	Lys	Tyr	
	115						120					125				
Arg	Pro	Arg	Lys	Lys	Val	Lys	Ser	Gly	Asn	Ala	Asn	Ser	Ser	Ser	Ser	
	130					135					140					
Ala	Ala	Ala	Ser	Ser	Lys	Pro	Gly	Glu	Lys	Gly	Asp	Lys	Val	Gly	Gly	
145					150					155					160	
Ser	Gly	Gly	Gly	Gly	His	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ser	Ser	Asn	
				165					170					175		
Ala	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ala	Ser	Gly	Gly	Gly	Ala	Asn	Ser	Lys
			180					185					190			
Pro	Ala	Gln	Lys	Lys	Ser	Cys	Gly	Ser	Lys	Val	Ala	Gly	Gly	Ala	Gly	
	195						200					205				
Gly	Gly	Val	Ser	Lys	Pro	His	Ala	Lys	Leu	Ile	Leu	Ala	Gly	Gly	Gly	
	210					215					220					
Gly	Gly	Gly	Lys	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ser	Phe	Ala	Ala	Glu	
225				230						235					240	
Gln	Ala	Gly	Ala	Ala	Ala	Leu	Leu	Pro	Leu	Gly	Ala	Ala	Ala	Asp	His	
				245					250					255		
His	Ser	Leu	Tyr	Lys	Ala	Arg	Thr	Pro	Ser	Ala	Ser	Ala	Ser	Ala	Ser	
			260					265					270			
Ser	Ala	Ala	Ser	Ala	Ser	Ala	Ala	Leu	Ala	Ala	Pro	Gly	Lys	His	Leu	
	275						280					285				
Ala	Glu	Lys	Lys	Val	Lys	Arg	Val	Tyr	Leu	Phe	Gly	Gly	Leu	Gly	Thr	
	290					295					300					
Ser	Ser	Ser	Pro	Val	Gly	Gly	Val	Gly	Ala	Gly	Ala	Asp	Pro	Ser	Asp	
305				310					315						320	
Pro	Leu	Gly	Leu	Tyr	Glu	Glu	Glu	Gly	Ala	Gly	Cys	Ser	Pro	Asp	Ala	

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<210> 1813
<211> 238
<212> PRT
<213> Homo sapiens
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<210> 1814
<211> 68
<212> PRT
<213> Homo sapiens
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[illegible]

<211> 572

<213> Hom

<213> Homo sapiens

Met 1	Ser	Tyr	Gln	Gly 5	Lys	Lys	Ser	Ile	Pro 10	His	Ile	Thr	Ser	Asp 15	Arg
Leu	Leu	Ile	Lys 20	Gly	Gly	Arg	Ile	Ile 25	Asn	Asp	Asp	Gln	Ser 30	Leu	Tyr
Ala	Asp 35	Val	Tyr	Leu	Glu	Asp	Gly 40	Leu	Ile	Lys	Gln	Ile 45	Gly	Glu	Asn
Leu	Ile 50	Val	Pro	Gly	Gly	Val 55	Lys	Thr	Ile	Glu	Ala 60	Asn	Gly	Arg	Met
Val 65	Ile	Pro	Gly	Gly	Ile 70	Asp	Val	Asn	Thr	Tyr 75	Leu	Gln	Lys	Pro	Ser 80
Gln	Gly	Met	Thr	Ala 85	Ala	Asp	Asp	Phe	Phe 90	Gln	Gly	Thr	Arg	Ala 95	Ala
Leu	Val	Gly	Gly 100	Thr	Thr	Met	Ile	Ile 105	Asp	His	Val	Val 110	Pro	Glu	Pro
Gly	Ser 115	Ser	Leu	Leu	Thr	Ser	Phe 120	Glu	Lys	Trp	His	Glu 125	Ala	Ala	Asp
Thr	Lys 130	Ser	Cys	Cys	Asp	Tyr 135	Ser	Leu	His	Val	Asp 140	Ile	Thr	Ser	Trp
Tyr 145	Asp	Gly	Val	Arg	Glu 150	Glu	Leu	Glu	Val	Leu 155	Val	Gln	Asp	Lys	Gly 160
Val	Asn	Ser	Phe 165	Gln	Val	Tyr	Met	Ala	Tyr 170	Lys	Asp	Val	Tyr	Gln 175	Met
Ser	Asp	Ser	Gln 180	Leu	Tyr	Glu	Ala	Phe 185	Thr	Phe	Leu	Lys 190	Gly	Leu	Gly
Ala	Val 195	Ile	Leu	Val	His	Ala	Glu 200	Asn	Gly	Asp	Leu	Ile 205	Ala	Gln	Glu
Gln	Lys 210	Arg	Ile	Leu	Glu	Met 215	Gly	Ile	Thr	Gly	Pro 220	Glu	Gly	His	Ala
Leu 225	Ser	Arg	Pro	Glu	Glu 230	Leu	Glu	Ala	Glu	Ala 235	Val	Phe	Arg	Ala	Ile 240
Thr	Ile	Ala	Gly	Arg 245	Ile	Asn	Cys	Pro	Val 250	Tyr	Ile	Thr	Lys	Val 255	Met
Ser	Lys	Ser	Ala 260	Ala	Asp	Ile	Ile	Ala 265	Leu	Ala	Arg	Lys	Lys 270	Gly	Pro

Leu Val Phe Gly Glu Pro Ile Ala Ala Ser Leu Gly Thr Asp Gly Thr
 275 280 285
 His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Phe Val Thr Ser
 290 295 300
 Pro Pro Leu Ser Pro Asp Pro Thr Thr Pro Asp Tyr Leu Thr Ser Leu
 305 310 315 320
 Leu Ala Cys Gly Asp Leu Gln Val Thr Gly Ser Gly His Cys Pro Tyr
 325 330 335
 Ser Thr Ala Gln Lys Ala Val Gly Lys Asp Asn Phe Thr Leu Ile Pro
 340 345 350
 Glu Gly Val Asn Gly Ile Glu Glu Arg Met Thr Val Val Trp Asp Lys
 355 360 365
 Ala Val Ala Thr Gly Lys Met Asp Glu Asn Gln Phe Val Ala Val Thr
 370 375 380
 Ser Thr Asn Ala Ala Lys Ile Phe Asn Leu Tyr Pro Arg Lys Gly Arg
 385 390 395 400
 Ile Ala Val Gly Ser Asp Ala Asp Val Val Ile Trp Asp Pro Asp Lys
 405 410 415
 Leu Lys Thr Ile Thr Ala Lys Ser His Lys Ser Ala Val Glu Tyr Asn
 420 425 430
 Ile Phe Glu Gly Met Glu Cys His Gly Ser Pro Leu Val Val Ile Ser
 435 440 445
 Gln Gly Lys Ile Val Phe Glu Asp Gly Asn Ile Asn Val Asn Lys Gly
 450 455 460
 Met Gly Arg Phe Ile Pro Arg Lys Ala Phe Pro Glu His Leu Tyr Gln
 465 470 475 480
 Arg Val Lys Ile Arg Asn Lys Val Phe Gly Leu Gln Gly Val Ser Arg
 485 490 495
 Gly Met Tyr Asp Gly Pro Val Tyr Glu Val Pro Ala Thr Pro Lys Tyr
 500 505 510
 Ala Thr Pro Ala Pro Ser Ala Lys Ser Ser Pro Ser Lys His Gln Pro
 515 520 525
 Pro Pro Ile Arg Asn Leu His Gln Ser Asn Phe Ser Leu Ser Gly Ala
 530 535 540
 Gln Ile Asp Asp Asn Asn Pro Arg Arg Thr Gly His Arg Ile Val Ala
 545 550 555 560
 Pro Pro Gly Gly Arg Ser Asn Ile Thr Ser Leu Gly
 565 570

<210> 1816

<211> 325

<212> PRT

<213> Homo sapiens

<400> 1816

Met Thr Glu Arg Arg Arg Asp Glu Leu Ser Glu Glu Ile Asn Asn Leu
 1 5 10 15
 Arg Glu Lys Val Met Lys Gln Ser Glu Glu Asn Asn Asn Leu Gln Ser
 20 25 30
 Gln Val Gln Lys Leu Thr Glu Glu Asn Thr Thr Leu Arg Glu Gln Val
 35 40 45
 Glu Pro Thr Pro Glu Asp Glu Asp Asp Asp Ile Glu Leu Arg Gly Ala
 50 55 60

Ala Ala Ala Ala Ala Pro Pro Pro Pro Ile Glu Glu Glu Cys Pro Glu
65 70 75 80
Asp Leu Pro Glu Lys Phe Asp Gly Asn Pro Asp Met Leu Ala Pro Phe
85 90 95
Met Ala Gln Cys Gln Ile Phe Met Glu Lys Ser Thr Arg Asp Phe Ser
100 105 110
Val Asp Arg Val Arg Val Cys Phe Val Thr Ser Met Met Thr Gly Arg
115 120 125
Ala Ala Arg Trp Ala Ser Ala Lys Leu Glu Arg Ser His Tyr Leu Met
130 135 140
His Asn Tyr Pro Ala Phe Met Met Glu Met Lys His Val Phe Glu Asp
145 150 155 160
Pro Gln Arg Arg Glu Val Ala Lys Arg Lys Ile Arg Arg Leu Arg Gln
165 170 175
Gly Met Gly Ser Val Ile Asp Tyr Ser Asn Ala Phe Gln Met Ile Ala
180 185 190
Gln Asp Leu Asp Trp Asn Glu Pro Ala Leu Ile Asp Gln Tyr His Glu
195 200 205
Gly Leu Ser Asp His Ile Gln Glu Glu Leu Ser His Leu Glu Val Ala
210 215 220
Lys Ser Leu Ser Ala Leu Ile Gly Gln Cys Ile His Ile Glu Arg Arg
225 230 235 240
Leu Ala Arg Ala Ala Ala Ala Arg Lys Pro Arg Ser Pro Pro Arg Ala
245 250 255
Leu Val Leu Pro His Ile Ala Ser His His Gln Val Asp Pro Thr Glu
260 265 270
Pro Val Gly Gly Ala Arg Met Arg Leu Thr Gln Glu Glu Lys Glu Arg
275 280 285
Arg Arg Lys Leu Asn Leu Cys Leu Tyr Cys Gly Thr Gly Gly His Tyr
290 295 300
Ala Asp Asn Cys Pro Ala Lys Ala Ser Lys Ser Ser Pro Ala Gly Asn
305 310 315 320
Ser Pro Ala Pro Leu
325

<210> 1817

<211> 357

<212> PRT

<213> Homo sapiens

<400> 1817

Met Leu Gln Ile His Leu Pro Gly Arg His Thr Leu Phe Val Arg Ala
1 5 10 15
Met Ile Asp Ser Gly Ala Ser Gly Asn Phe Ile Asp His Glu Tyr Val
20 25 30
Ala Gln Asn Gly Ile Pro Leu Arg Ile Lys Asp Trp Pro Ile Leu Val
35 40 45
Glu Ala Ile Asp Gly Arg Pro Ile Ala Ser Gly Pro Val Val His Glu
50 55 60
Thr His Asp Leu Ile Val Asp Leu Gly Asp His Arg Glu Val Leu Ser
65 70 75 80
Phe Asp Val Thr Gln Ser Pro Phe Phe Pro Val Val Leu Gly Val Arg
85 90 95

Trp Leu Ser Thr His Asp Pro Asn Ile Thr Trp Ser Thr Arg Ser Ile
 100 105 110
 Val Phe Asp Ser Glu Tyr Cys Arg Tyr His Cys Arg Met Tyr Ser Pro
 115 120 125
 Ile Pro Pro Ser Leu Pro Pro Pro Ala Pro Gln Pro Pro Leu Tyr Tyr
 130 135 140
 Pro Val Asp Gly Tyr Arg Val Tyr Gln Pro Val Arg Tyr Tyr Tyr Val
 145 150 155 160
 Gln Asn Val Tyr Thr Pro Val Asp Glu His Val Tyr Pro Asp His Arg
 165 170 175
 Leu Val Asp Pro His Ile Glu Met Ile Pro Gly Ala His Ser Ile Pro
 180 185 190
 Ser Gly His Val Tyr Ser Leu Ser Glu Pro Glu Met Ala Ala Leu Arg
 195 200 205
 Asp Phe Val Ala Arg Asn Val Lys Asp Gly Leu Ile Thr Pro Thr Ile
 210 215 220
 Ala Pro Asn Gly Ala Gln Val Leu Gln Val Lys Arg Gly Trp Lys Leu
 225 230 235 240
 Gln Val Ser Tyr Asp Cys Arg Ala Pro Asn Asn Phe Thr Ile Gln Asn
 245 250 255
 Gln Tyr Pro Arg Leu Ser Ile Pro Asn Leu Glu Asp Gln Ala His Leu
 260 265 270
 Ala Thr Tyr Thr Glu Phe Val Pro Gln Ile Pro Gly Tyr Gln Thr Tyr
 275 280 285
 Pro Thr Tyr Ala Ala Tyr Pro Thr Tyr Pro Val Gly Phe Ala Trp Tyr
 290 295 300
 Pro Val Gly Arg Asp Gly Gln Gly Arg Ser Leu Tyr Val Pro Val Met
 305 310 315 320
 Ile Thr Trp Asn Pro His Trp Tyr Arg Gln Pro Pro Val Pro Gln Tyr
 325 330 335
 Pro Pro Pro Gln Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
 340 345 350
 Ser Tyr Ser Thr Leu
 355

<210> 1818

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1818

Met Ser Thr Gly Asn Thr Val Cys Ser Arg Tyr His Phe Tyr Val Arg
 1 5 10 15
 Val Asn Gln Ala Val Ile Trp Val Asp Val Leu Ile Tyr Trp Ser Val
 20 25 30
 His Ile Leu Asp Ile Val Ile Pro His Trp Leu Val Asn Ser Val Ser
 35 40 45
 Ile Tyr Trp Ile Ile Glu Trp Arg Leu Trp Cys Trp Trp Trp Glu Arg
 50 55 60
 Trp Trp Tyr Trp Arg Ile His Pro Ala Val Val Ala Ala Val Phe Arg
 65 70 75 80
 Ile Lys Asp Asp Arg Ser Ser Ala Pro Cys Asp Ile Gly Ile Met Cys
 85 90 95

Ala Gln Pro Ala Asn Pro
100

<210> 1819
<211> 831
<212> PRT
<213> Homo sapiens

<400> 1819
Met Glu Arg Ala Gly Ala Thr Ser Arg Gly Gly Gln Ala Pro Gly Phe
1 5 10 15
Leu Leu Arg Leu His Thr Glu Gly Arg Ala Glu Ala Arg Val Gln
20 25 30
Glu Gln Asp Leu Arg Gln Trp Gly Leu Thr Gly Ile His Leu Arg Ser
35 40 45
Tyr Gln Leu Glu Gly Val Asn Trp Leu Ala Gln Arg Phe His Cys Gln
50 55 60
Asn Gly Cys Ile Leu Gly Asp Glu Met Gly Leu Gly Lys Thr Cys Gln
65 70 75 80
Thr Ile Ala Leu Phe Ile Tyr Leu Ala Gly Arg Leu Asn Asp Glu Gly
85 90 95
Pro Phe Leu Ile Leu Cys Pro Leu Ser Val Leu Ser Asn Trp Lys Glu
100 105 110
Glu Met Gln Arg Phe Ala Pro Gly Leu Ser Cys Val Thr Tyr Ala Gly
115 120 125
Asp Lys Glu Glu Arg Ala Cys Leu Gln Gln Asp Leu Lys Gln Glu Ser
130 135 140
Arg Phe His Val Leu Leu Thr Thr Tyr Glu Ile Cys Leu Lys Asp Ala
145 150 155 160
Ser Phe Leu Lys Ser Phe Pro Trp Ser Val Leu Val Val Asp Glu Ala
165 170 175
His Arg Leu Lys Asn Gln Ser Ser Leu Leu His Lys Thr Leu Ser Glu
180 185 190
Phe Ser Val Val Phe Ser Leu Leu Leu Thr Gly Thr Pro Ile Gln Asn
195 200 205
Ser Leu Gln Glu Leu Tyr Ser Leu Leu Ser Phe Val Glu Pro Asp Leu
210 215 220
Phe Ser Lys Glu Glu Val Gly Asp Phe Ile Gln Arg Tyr Gln Asp Ile
225 230 235 240
Glu Lys Glu Ser Glu Ser Ala Ser Glu Leu His Lys Leu Leu Gln Pro
245 250 255
Phe Leu Leu Arg Arg Val Lys Ala Glu Val Ala Thr Glu Leu Pro Lys
260 265 270
Lys Thr Glu Val Val Ile Tyr His Gly Met Ser Ala Leu Gln Lys Lys
275 280 285
Tyr Tyr Lys Ala Ile Leu Met Lys Asp Leu Asp Ala Phe Glu Asn Glu
290 295 300
Thr Ala Lys Lys Val Lys Leu Gln Asn Ile Leu Ser Gln Leu Arg Lys
305 310 315 320
Cys Val Asp His Pro Tyr Leu Phe Asp Gly Val Glu Pro Glu Pro Phe
325 330 335
Glu Val Gly Asp His Leu Thr Glu Ala Ser Gly Lys Leu His Leu Leu
340 345 350

Asp	Lys	Leu	Leu	Ala	Phe	Leu	Tyr	Ser	Gly	Gly	His	Arg	Val	Leu	Leu
		355					360					365			
Phe	Ser	Gln	Met	Thr	Gln	Met	Leu	Asp	Ile	Leu	Gln	Asp	Tyr	Met	Asp
		370					375					380			
Tyr	Arg	Gly	Tyr	Ser	Tyr	Glu	Arg	Val	Asp	Gly	Ser	Val	Arg	Gly	Glu
385						390				395					400
Glu	Arg	His	Leu	Ala	Ile	Lys	Asn	Phe	Gly	Gln	Gln	Pro	Ile	Phe	Val
				405					410					415	
Phe	Leu	Leu	Ser	Thr	Arg	Ala	Gly	Gly	Val	Gly	Met	Asn	Leu	Thr	Ala
				420					425					430	
Ala	Asp	Thr	Val	Ile	Phe	Val	Asp	Ser	Asp	Phe	Asn	Pro	Gln	Asn	Asp
							440					445			
Leu	Gln	Ala	Ala	Ala	Arg	Ala	His	Arg	Ile	Gly	Gln	Asn	Lys	Ser	Val
							455					460			
Lys	Val	Ile	Arg	Leu	Ile	Gly	Arg	Asp	Thr	Val	Glu	Glu	Ile	Val	Tyr
465						470				475					480
Arg	Lys	Ala	Ala	Ser	Lys	Leu	Gln	Leu	Thr	Asn	Met	Ile	Ile	Glu	Gly
					485					490				495	
Gly	His	Phe	Thr	Leu	Gly	Ala	Gln	Lys	Pro	Ala	Ala	Asp	Ala	Asp	Leu
				500				505					510		
Gln	Leu	Ser	Glu	Ile	Leu	Lys	Phe	Gly	Leu	Asp	Lys	Leu	Leu	Ala	Ser
							520					525			
Glu	Gly	Ser	Thr	Met	Asp	Glu	Ile	Asp	Leu	Glu	Ser	Ile	Leu	Gly	Glu
							535					540			
Thr	Lys	Asp	Gly	Gln	Trp	Val	Ser	Asp	Ala	Leu	Pro	Ala	Ala	Glu	Gly
545						550				555					560
Gly	Ser	Arg	Asp	Gln	Glu	Glu	Gly	Lys	Asn	His	Met	Tyr	Leu	Phe	Glu
					565					570				575	
Gly	Lys	Asp	Tyr	Ser	Lys	Glu	Pro	Ser	Lys	Glu	Asp	Arg	Lys	Ser	Phe
				580				585					590		
Glu	Gln	Leu	Val	Asn	Leu	Gln	Lys	Thr	Leu	Leu	Glu	Lys	Ala	Ser	Gln
							600					605			
Glu	Gly	Arg	Ser	Leu	Arg	Asn	Lys	Gly	Ser	Val	Leu	Ile	Pro	Gly	Leu
							615				620				
Val	Glu	Gly	Ser	Thr	Lys	Arg	Lys	Arg	Val	Leu	Ser	Pro	Glu	Glu	Leu
625						630				635					640
Glu	Asp	Arg	Gln	Lys	Lys	Arg	Gln	Glu	Ala	Ala	Ala	Lys	Arg	Arg	Arg
					645					650				655	
Leu	Ile	Glu	Glu	Lys	Lys	Arg	Gln	Lys	Glu	Glu	Ala	Glu	His	Lys	Lys
					660				665				670		
Lys	Val	Ala	Trp	Trp	Glu	Ser	Asn	Asn	Tyr	Gln	Ser	Phe	Cys	Leu	Pro
							680					685			
Ser	Glu	Glu	Ser	Glu	Pro	Glu	Asp	Leu	Glu	Asn	Gly	Glu	Glu	Ser	Ser
							695				700				
Ala	Glu	Leu	Asp	Tyr	Gln	Asp									

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<210> 1820
<211> 212
<212> PRT
<213> Homo sapiens
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<210> 1821
<211> 323
<212> PRT
<213> Homo sapiens
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<400> 1821
Met Asp Ser Lys Tyr Gln Cys Val Lys Leu Asn Asp Gly His Phe Met
 1          5          10          15
Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Ser
      20          25          30

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Lys Ala Leu Glu Ala Val Lys Leu Ala Ile Glu Ala Gly Tyr His His
 35 40 45
 Ile Asp Ser Ala His Val Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala
 50 55 60
 Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe
 65 70 75 80
 Tyr Thr Ser Lys Leu Trp Ser Asn Ser His Arg Pro Glu Leu Val Arg
 85 90 95
 Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Ala Asp
 100 105 110
 Leu Tyr Leu Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val
 115 120 125
 Ile Pro Lys Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu
 130 135 140
 Cys Ala Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly Leu Ala
 145 150 155 160
 Lys Ser Ile Gly Val Ser Asn Phe Asn His Arg Leu Leu Glu Met Ile
 165 170 175
 Leu Asn Glu Pro Gly Leu Lys Tyr Glu Pro Val Cys Asn Gln Val Glu
 180 185 190
 Cys His Pro Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser
 195 200 205
 Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu
 210 215 220
 Glu Pro Trp Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val
 225 230 235 240
 Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala
 245 250 255
 Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr
 260 265 270
 Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu
 275 280 285
 Thr Ser Glu Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg
 290 295 300
 Tyr Leu Thr Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Ile Ser
 305 310 315 320
 Asp Glu Tyr

<210> 1822

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1822

Met Gly Phe Gln Lys Phe Ser Pro Phe Leu Ala Leu Ser Ile Leu Val
 1 5 10 15
 Leu Leu Gln Ala Gly Ser Leu His Ala Ala Pro Phe Arg Ser Ala Leu
 20 25 30
 Glu Ser Ser Pro Ala Asp Pro Ala Thr Leu Ser Glu Asp Glu Ala Arg
 35 40 45
 Leu Leu Leu Ala Ala Leu Val Gln Asp Tyr Val Gln Met Lys Ala Ser
 50 55 60

Glu	Leu	Glu	Gln	Glu	Gln	Glu	Arg	Glu	Gly	Ser	Ser	Leu	Asp	Ser	Pro
65				70					75					80	
Arg	Ser	Lys	Arg	Cys	Gly	Asn	Leu	Ser	Thr	Cys	Met	Leu	Gly	Thr	Tyr
			85					90					95		
Thr	Gln	Asp	Phe	Asn	Lys	Phe	His	Thr	Phe	Pro	Gln	Thr	Ala	Ile	Gly
		100						105				110			
Val	Gly	Ala	Pro	Gly	Lys	Lys	Arg	Asp	Met	Ser	Ser	Asp	Leu	Glu	Arg
	115						120					125			
Asp	His	Arg	Pro	His	Val	Ser	Met	Pro	Gln	Asn	Ala	Asn			
	130					135					140				

<210> 1823

<211> 6188

<212> DNA

<213> Homo sapiens

<400> 1823

caacaacaac	aactccaagc	acaccggcca	taagagtgcg	tgtgtcccca	acatgaccga	60
acgaagaagg	gacgagctct	ctgaagagat	caacaactta	agagagaagg	tcatgaagca	120
gtcggaggag	aacaacaacc	tgcagagcca	ggtgcagaag	ctcacagagg	agaacaccac	180
ccttcgagag	caagtggaac	ccaccctga	ggatgaggat	gatgacatcg	agctccgcgg	240
tgctgcagca	gctgctgccc	cacccctcc	aatagaggaa	gagtgccag	aagacctccc	300
agagaagttc	gatggcaacc	cagacatgct	ggctccttc	atggcccagt	gccagatctt	360
catggaaaag	agcaccaggg	atttctcagt	tgatcgtgtc	cgtgtctgct	tcgtgacaag	420
catgatgacc	ggccgtgctg	ccggttgggc	ctcagcaaaag	ctggagcgct	cccactacct	480
gatgcacaac	taccagctt	tcatgatgga	aatgaagcat	gtctttgaag	accctcagag	540
gcgagagggt	gccaacgcga	agatcagacg	cctgcgcca	ggcatgggg	ctgtcatcga	600
ctactccaat	gctttccaga	tgattgccca	ggacctggat	tggaaacgagc	ctgcgctgat	660
tgaccagtac	cacgagggcc	tcagcgacca	cattcaggag	gagctctccc	acctcgagg	720
cgccaagtgc	ctgtctgctc	tgattgggca	gtgcattcac	attgagagaa	ggctggccag	780
ggctgctgca	gctcgcaagc	caagctcgcc	accccgggcg	ctgggtgttc	ctcacattgc	840
aagccaccac	caggtagatc	caaccgagcc	ggtgggaggt	gcccgcagtc	gcctgacgca	900
ggaagaaaaa	gaaagacgca	gaaagctgaa	cctgtgcctc	tactgtggaa	caggagggtca	960
ctacgctgac	aattgtcctg	ccaaggcctc	aaagtcttcg	ccggcgggaa	actccccggc	1020
cccgtgttag	agggaccttc	agcgaccggg	ccagaaataa	taagggtccc	acaagatgat	1080
gectcatctc	cacacttgca	agtgatgtct	cagattcatc	ttccgggcag	acacacctg	1140
ttcgtccgag	ccatgatcga	ttctgggtgt	tctggcaact	tcattgatca	cgaatatgtt	1200
gctcaaaatg	gaattcctct	agaatcaag	gactggccaa	tacttgtgga	agcaattgat	1260
gggcgcccc	tagcatcggg	cccagttgtc	cacgaaactc	acgacctgat	agttgacctg	1320
ggagatcacc	gagaggtgct	gtcatttgat	gtgactcagt	ctccattctt	ccctgtcgtc	1380
ctaggggttc	gctggctgag	cacacatgat	cccaatatca	catggagcac	tcgatctatc	1440
gtctttgatt	ctgaatactg	ccgtaccac	tgccggatgt	attctccaat	accaccatcg	1500
ctcccaccac	cagcaccaca	accgccactc	tattatccag	tagatggata	cagagtttac	1560
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      20             25             30
Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe
      35             40             45
Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro
      50             55             60
Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val

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65 70 75 80
 Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu
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 Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln
 100 105 110
 Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg
 115 120 125
 Ile Arg Leu Val Val Thr Lys Gly Phe Ser Gly Thr Pro Gly Ser Asn
 130 135 140
 Glu Asn Ser Thr Gln Asn Val Tyr Lys Ile Pro Pro Thr Thr Thr Lys
 145 150 155 160
 Ala Leu Cys Pro Leu Tyr Thr Ser Pro Arg Thr Val Thr Gln Ala Pro
 165 170 175
 Pro Lys Ser Thr Ala Asp Val Ser Thr Pro Asp Ser Glu Ile Asn Leu
 180 185 190
 Thr Asn Val Thr Asp Ile Ile Arg Val Pro Val Phe Asn Ile Val Ile
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 Leu Leu Ala Gly Gly Phe Leu Ser Lys Ser Leu Val Phe Ser Val Leu
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<210> 1826
 <211> 192
 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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 caaacaccgg ggataaatct ggatttgggt tccggcgtca aggtgaagat aatacctaaa 240
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 <212> DNA
 <213> Homo sapiens

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<211> 111

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 1831

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1831

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<210> 1832

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1832

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 <211> 37
 <212> PRT
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<400> 1833
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<210> 1834
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 <212> PRT
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<400> 1834
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<210> 1835
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<400> 1835
 Pro Lys Gly Lys Thr Ser Ala Tyr Ala Phe Phe Val Gln Thr Cys Arg
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 Glu Glu His Lys
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<210> 1836
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<400> 1836
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 Glu Val Pro Val

1833
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 1835
 1836

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<210> 1837
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<210> 1838
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<400> 1838
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<210> 1839
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<400> 1839
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<210> 1840
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<400> 1840
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<210> 1841
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1837 1838 1839 1840 1841

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<210> 1846
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<400> 1846
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<210> 1847
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<400> 1847
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<210> 1848
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<400> 1848
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<210> 1849
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<210> 1850
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<400> 1850

<210> 1851

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1851

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<210> 1852

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1852

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<210> 1853

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1853

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<210> 1854

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1854

Lys Ser Lys Gly Lys Phe Asp Gly Ala Lys Gly Pro Ala Lys Val Ala
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<210> 1855
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<400> 1855
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<210> 1856
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<210> 1859
 <211> 33
 <212> DNA
 <213> Artificial Sequence

1855-1859

<220>
<223> PCR primer

<400> 1859
agatgaattc acgcgtccgc gccgcgcggc gca 33

<210> 1860
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 1860
agttctcgag tcacctccct gggccccttt g 31

<210> 1861
<211> 945
<212> DNA
<213> Homo sapiens

<400> 1861
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccaggggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttggtg ttgtcgacaa caacggcaac 180
ggcgacagag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcgtg cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcatcatcc cggtgacgtc atctcgggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt cacgcgtccg 420
cgccgcgcgg cgcaggggag gcgagaggcg ccccccggtg gagagcctga gccccgcgca 480
agtctggcgg cacctggcga gcgagaccgg agtcgggctg gggaccgcgg ggttgaggcc 540
ggaccgcggc ggggtcgggg gagaaacgcg cgctgccctg gcacggggccc caaccccccg 600
gccgcgcgga atggtatggc ccggccggag ttaaggccgg ggggaggcgg cgagtcgccg 660
ggcggcgcgg acgatggggc tgcgtgcagg aggaacgctg ggcagggccg gcgcgggtcg 720
gggggcgcgg gaggggcccc ggccgagcgg cggcgcgagc ggcggcagca tccactcggg 780
ccgcatcgcc gcggtgcaca acgtgccgct gacgtgtgtc atccggccgc tgccgtccgt 840
gttggaaccc gccaaaggtg agagcctcgt ggacacgatc cgggaggacc cagacagcgt 900
gcccccatc gatgtcctct ggatcaaagg gggccaggga ggtga 945

<210> 1862
<211> 822
<212> DNA
<213> Homo sapiens

<400> 1862
atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccaggggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
accgttcata tcgggcctac cgccttcctc ggcttggtg ttgtcgacaa caacggcaac 180
ggcgacagag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
ggcgacgtga tcaccgcgtg cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
gcgcttaacg ggcatcatcc cggtgacgtc atctcgggtga cctggcaaac caagtcgggc 360
ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt cgggctgcgt 420
gcaggaggaa cgctgggcag ggccggcgcg ggtcgggggg cggccgaggg gcccgggccg 480

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<210> 1863
<211> 314
<212> PRT
<213> Homo sapiens
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Met 1	His	His	His	His	His	His	Thr	Ala	Ala	Ser	Asp	Asn	Phe	Gln	Leu
Ser	Gln	Gly	Gly	Gln	Gly	Phe	Ala	Ile	Pro	Ile	Gly	Gln	Ala	Met	Ala
Ile	Ala	Gly	Gln	Ile	Lys	Leu	Pro	Thr	Val	His	Ile	Gly	Pro	Thr	Ala
Phe	Leu	Gly	Leu	Gly	Val	Val	Asp	Asn	Asn	Gly	Asn	Gly	Ala	Arg	Val
Gln	Arg	Val	Val	Gly	Ser	Ala	Pro	Ala	Ala	Ser	Leu	Gly	Ile	Ser	Thr
Gly	Asp	Val	Ile	Thr	Ala	Val	Asp	Gly	Ala	Pro	Ile	Asn	Ser	Ala	Thr
Ala	Met	Ala	Asp	Ala	Leu	Asn	Gly	His	His	Pro	Gly	Asp	Val	Ile	Ser
Val	Thr	Trp	Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr
Leu	Ala	Glu	Gly	Pro	Pro	Ala	Glu	Phe	Thr	Arg	Pro	Arg	Arg	Ala	Ala
Gln	Gly	Arg	Arg	Glu	Ala	Pro	Pro	Gly	Gly	Glu	Pro	Glu	Pro	Arg	Ala
Ser	Leu	Ala	Ala	Pro	Gly	Glu	Arg	Ser	Arg	Ser	Arg	Ala	Gly	Asp	Arg
Gly	Val	Glu	Ala	Gly	Pro	Arg	Arg	Gly	Arg	Gly	Arg	Asn	Ala	Arg	Cys
Pro	Gly	Thr	Gly	Pro	Asn	Pro	Pro	Ala	Ala	Arg	Asn	Gly	Met	Ala	Arg
Pro	Glu	Leu	Arg	Pro	Gly	Gly	Gly	Gly	Glu	Ser	Arg	Gly	Gly	Gly	Asp
Asp	Gly	Ala	Ala	Cys	Arg	Arg	Asn	Ala	Gly	Gln	Gly	Arg	Arg	Gly	Ser
Gly	Gly	Ala	Arg	Gly	Ala	Arg	Ala	Glu	Arg	Arg	Arg	Ala	Gly	Arg	Gln
His	Pro	Leu	Gly	Pro	His	Arg	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Glu	Arg
Ala	His	Pro	Ala	Ala	Ala	Val	Arg	Val	Gly	Pro	Arg	Gln	Gly	Ala	Glu
Pro	Arg	Gly	His	Asp	Pro	Gly	Gly	Pro	Arg	Gln	Arg	Ala	Pro	His	Arg
Cys	Pro	Leu	Asp	Gln	Arg	Gly	Pro	Gly	Arg						

<210> 1864
 <211> 273
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
 1 5 10 15
 Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
 20 25 30
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
 35 40 45
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
 50 55 60
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
 65 70 75 80
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
 85 90 95
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
 100 105 110
 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
 115 120 125
 Leu Ala Glu Gly Pro Pro Ala Glu Phe Gly Leu Arg Ala Gly Gly Thr
 130 135 140
 Leu Gly Arg Ala Gly Ala Gly Arg Gly Ala Pro Glu Gly Pro Gly Pro
 145 150 155 160
 Ser Gly Gly Ala Gln Gly Gly Ser Ile His Ser Gly Arg Ile Ala Ala
 165 170 175
 Val His Asn Val Pro Leu Ser Val Leu Ile Arg Pro Leu Pro Ser Val
 180 185 190
 Leu Asp Pro Ala Lys Val Gln Ser Leu Val Asp Thr Ile Arg Glu Asp
 195 200 205
 Pro Asp Ser Val Pro Pro Ile Asp Val Leu Trp Ile Lys Gly Ala Gln
 210 215 220
 Gly Gly Asp Tyr Phe Tyr Ser Phe Gly Gly Cys His Arg Tyr Ala Ala
 225 230 235 240
 Tyr Gln Gln Leu Gln Arg Glu Thr Ile Pro Ala Lys Leu Val Gln Ser
 245 250 255
 Thr Leu Ser Asp Leu Arg Val Tyr Leu Gly Ala Ser Thr Pro Asp Leu
 260 265 270
 Gln

<210> 1865
 <211> 790
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ctgattccgc gactccttgg ccgccgctgc gcatggaaag ctctgccaag atggagagcg 60
 gcggcgccgg ccagcagccc cagccgcagc cccagcagcc cttcctgccg ccgcagacct 120
 gtttcctttgc cacggccgca gccgcggcgg ccgcagccgc cgcagcggca gcgcagagcg 180

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cgcagcagca gcagcagcag cagcagcagc agcagcagcg gccgcagctg agaccggcgg 240
ccgacggcca gccctcaggg ggcggtcaca agtcagcgcc caagcaagtc aagcgacagc 300
gctcgtcttc gcccgaaactg atgcgctgca aacgccggct caacttcagc ggctttggct 360
acagcctgcc gcagcagcag ccggcccgccg tggcgcgccg caacgagcgc gagcgcaacc 420
gcgtcaagtt ggtcaacctg ggctttgcca cccttcggga gcacgtccc aacggcgcg 480
ccaacaagaa gatgagtaag gtggagacac tgcgctcggc ggtcgagtac atccgcgcgc 540
tgcagcagct gctggacgag catgacgcgg tgagcgccgc cttccaggca gggtcctgt 600
cgccccaccat ctcccccaac tactccaacg acttgaactc catggccggc tcgcccgtct 660
catcctactc gtcggacgag ggctcttacg acccgctcag ccccgaggag caggagcttc 720
tcgacttcac caactggttc tgaggggctc ggcttggta gcccttggg cgaatggact 780
ttggaagcag                                     790

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<210> 1866

<211> 784

<212> DNA

<213> Homo sapiens

<400> 1866

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ccgcgactcc ttggcccgccg ctgcgcatgg aaagctctgc caagatggag agcggcgggc 60
ccggccagca gcccagccg cagccccagc agcccttctt gccgcccga gcctgtttct 120
ttgccacggc cgcagcccg gcgcccgag ccgcccagc ggcagcgagc agcgcgcagc 180
agcagcagca gcagcagcag cagcagcagc aggcgcgcga gctgagaccg gcggccgacg 240
gccagccctc agggggcggt cacaagtcag cgcccaagca agtcaagcga cagcgctcgt 300
cttcgcccga actgatgcgc tgcaaaccgc ggctcaactt cagcggtctt ggctacagcc 360
tgccgcagca gcagccggcc gccgtggcgc gccgcaacga gcgcgagcgc aaccgcgtca 420
agttgggtcaa cctgggcttt gccacccttc gggagcacgt ccccaacggc gcggccaaca 480
agaagatgag taaggtggag aactgcgct cgcggtcga gtacatccgc gcgtgcagc 540
agctgctgga cgagcatgac gcggtgagcg ccgcttcca ggcaggcgct ctgtcgcca 600
ccatctcccc caactactcc aacgacttga actccatggc cggtcgccg gtctcatcct 660
actcgtcgga cgagggctct tacgaccgc tcagcccga ggagcaggag cttctcgact 720
tcaccaactg gttctgaggg gctcggcctg gtcaggccct ggtgcgaatg gactttgga 780
gcag                                     784

```

<210> 1867

<211> 789

<212> DNA

<213> Homo sapiens

<400> 1867

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ttccgcgact ccttgggccgc cgctgcgcat ggaaagctct gccaaagatgg agagcggcgg 60
cgccggccag cagccccagc cgagcccca gcagccctc ctgcgcccg cagcctgttt 120
ctttgccacg gccgcagccg cggcgccgc agccgcgcga gcggcagcgc agagcgcgca 180
gcagcagcag cagcagcagc agcagcagca gcagcaggcg ccgcagctga gaccggcgcc 240
cgacggccag ccctcagggg gcggtcacia gtcagcgccc aagcaagtca agcgacagcg 300
ctcgtcttcg cccgaactga tgcgctgcaa acgcggctc aacttcagcg gctttggcta 360
cagcctgccg cagcagcagc cggccgcgtt ggcgcgccg aacgagcgc agcgcaaccg 420
cgtcaagttg gtcaacctg gctttgccac ccttcgggag cacgtcccca acggcgcgcc 480
caacaagaag atgagtaagg tggagacact gcgctcggcg gtcgagtaca tccgcgcgct 540
gcagcagctg ctggacgagc atgacgcggt gaggcgccgc ttccaggcag gcgtcctgtc 600
gcccaccatc tcccccaact actccaacga cttgaactcc atggccggct cgccggtctc 660
atcctactcg tcggacgagg gctcttacga cccgctcagc cccgaggagc aggagcttct 720
cgacttcacc aactggttct gaggggctcg gccttggtag gcccttggg gaatggactt 780
tggaaagcag                                     789

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<210> 1868
 <211> 785
 <212> DNA
 <213> Homo sapiens

<400> 1868
 tctgattccg cgactccttg gccgccgctg cgcattgaaa gctctgccaa gatggagagc 60
 ggcgggcgccg gccagcagcc ccagccgcag ccccagcagc ccttcctgcc gcccgagcc 120
 tgtttctttg ccacggccgc agccgcggcg gccgcagccg ccgcagcggc agcgagagc 180
 gcgcagcagc agcagcagca gcagcagcag caggcgccgc agctgagacc ggcgggccgac 240
 ggccagccct cagggggcgg tcacaagtca gcgcccaagc aagtcaagcg acagcgctcg 300
 tcttcgcccc aactgatgcg ctgcaaacgc cggctcaact tcagcggctt tggctacagc 360
 ctgccgcagc agcagccggc cgccgtggcg cgccgcaacg agcgcgagcg caaccgcgtc 420
 aagttgggtca acctgggctt tgccaccctt cgggagcacg tccccaacg cgcgggccaac 480
 aagaagatga gtaaggtgga gacactgcgc tcggcggtcg agtacatccg cgcgctgcag 540
 cagctgctgg acgagcatga cgcggtgagc gccgccttcc aggcaggcgt cctgtcgccc 600
 accatctccc ccaactactc caacgacttg aactccatgg ccggctcgcc ggtctcatcc 660
 tactcgctcg acgagggctc ttacgacccg ctcagccccg aggagcagga gcttctcgac 720
 ttcaccaact ggttctgagg ggctcggcct ggtcaggccc tgggtcggaat ggactttgga 780
 agcag 785

<210> 1869
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 1869
 Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 1 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro
 50 55 60
 Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys
 65 70 75 80
 Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu
 85 90 95
 Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu
 100 105 110
 Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg
 115 120 125
 Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His
 130 135 140
 Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu
 145 150 155 160
 Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu
 165 170 175
 His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro Thr
 180 185 190
 Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser Pro
 195 200 205
 Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser Pro

210 215 220
 Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

<210> 1870
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 1870
 Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 1 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro
 50 55 60
 Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys
 65 70 75 80
 Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu
 85 90 95
 Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu
 100 105 110
 Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg
 115 120 125
 Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His
 130 135 140
 Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu
 145 150 155 160
 Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu
 165 170 175
 His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro Thr
 180 185 190
 Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser Pro
 195 200 205
 Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser Pro
 210 215 220
 Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

<210> 1871
 <211> 237
 <212> PRT
 <213> Homo sapiens

<400> 1871
 Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 1 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln

35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala
 50 55 60
 Pro Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His
 65 70 75 80
 Lys Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu
 85 90 95
 Leu Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser
 100 105 110
 Leu Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu
 115 120 125
 Arg Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu
 130 135 140
 His Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr
 145 150 155 160
 Leu Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp
 165 170 175
 Glu His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro
 180 185 190
 Thr Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser
 195 200 205
 Pro Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser
 210 215 220
 Pro Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

<210> 1872

<211> 234

<212> PRT

<213> Homo sapiens

<400> 1872

Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 1 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro Gln Leu
 50 55 60
 Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys Ser Ala
 65 70 75 80
 Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu Met Arg
 85 90 95
 Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu Pro Gln
 100 105 110
 Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg Asn Arg
 115 120 125
 Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His Val Pro
 130 135 140
 Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu Arg Ser
 145 150 155 160
 Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu His Asp

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<210> 1873
<211> 1353
<212> DNA
<213> Homo sapiens
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<210> 1874
<211> 250
<212> PRT
<213> Homo sapiens
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<400> 1874															
Met	Asn	Ser	Met	Thr	Ser	Ala	Val	Pro	Val	Ala	Asn	Ser	Val	Leu	Val
1				5					10					15	
Val	Ala	Pro	His	Asn	Gly	Tyr	Pro	Val	Thr	Pro	Gly	Ile	Met	Ser	His
			20					25					30		
Val	Pro	Leu	Tyr	Pro	Asn	Ser	Gln	Pro	Gln	Val	His	Leu	Val	Pro	Gly
		35					40					45			
Asn	Pro	Pro	Ser	Leu	Val	Ser	Asn	Val	Asn	Gly	Gln	Pro	Val	Gln	Lys

50 55 60
 Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala Ile Gln Ile Ile Ile Gly
 65 70 75 80
 Leu Ala His Ile Gly Leu Gly Ser Ile Met Ala Thr Val Leu Val Gly
 85 90 95
 Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly Phe Pro Phe Trp Gly Gly
 100 105 110
 Leu Trp Phe Ile Ile Ser Glu Ser Leu Ser Val Ala Ala Glu Asn Gln
 115 120 125
 Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser Leu Gly Leu Asn Ile Val
 130 135 140
 Ser Ala Ile Cys Ser Ala Val Gly Val Ile Leu Phe Ile Thr Asp Leu
 145 150 155 160
 Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala Trp
 165 170 175
 Gly Val Asn Pro Gly Met Ala Ile Ser Gly Val Leu Leu Val Phe Cys
 180 185 190
 Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser Ser His Phe Gly Cys Gln
 195 200 205
 Leu Val Cys Cys Gln Ser Ser Asn Val Ser Val Ile Tyr Pro Asn Ile
 210 215 220
 Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu Pro Val Thr Ser Pro Pro
 225 230 235 240
 Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
 245 250

<210> 1875

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 1875

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 cagggatctg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120
 accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
 ggcgcacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240
 ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
 gcgcttaacg ggcacatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360
 ggcacgcgta cagggaaagt gacattggcc gagggacccc cggccgaatt catgacttca 420
 gcagttccgg tggccaattc tgtgttggtg gtggcacccc acaatgggta tcctgtgacc 480
 ccaggaatta tgtctcacgt gcccctgtat ccaaacagcc agccgcaagt ccacctagtt 540
 cctgggaacc cacctagttt ggtgtcgaat gtgaatgggc agcctgtgca gaaagctctg 600
 aaagaaggca aaaccttggg ggccatccag atcatcattg gcctggctca catcggcctc 660
 ggctccatca tggcgacggt tctcgtaggg gaatacctgt ctatttcatt ctacggaggc 720
 tttcccttct ggggaggctt gtggtttatc atttcagaat ctctctcgtt ggcagcagaa 780
 aatcagccat attcttattg cctgctgtct ggcagtttgg gcttgaacat cgtcagtgca 840
 atctgctctg cagttggagt catactcttc atcacagatc taagtattcc ccacccatat 900
 gcctaccccg actattatcc ttacgcctgg ggtgtgaacc ctggaatggc gatttctggc 960
 gtgctgctgg tcttctgcct cctggagttt ggcacgcgat gcgcatcttc ccactttggc 1020
 tgccagttgg tctgctgtca atcaagcaat gtgagtgatc tctatccaaa catctatgca 1080
 gcaaaccag tgatcacccc agaaccggtg acctcaccac caagttattc cagtgaagtc 1140
 caagcaaata agtaa 1155

<210> 1876
 <211> 384
 <212> PRT
 <213> Homo sapiens

<400> 1876

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Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
 1          5          10          15
Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
          20          25          30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
          35          40          45
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
          50          55          60
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
          65          70          75          80
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
          85          90          95
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
          100          105          110
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
          115          120          125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Thr Ser Ala Val Pro Val
          130          135          140
Ala Asn Ser Val Leu Val Val Ala Pro His Asn Gly Tyr Pro Val Thr
          145          150          155          160
Pro Gly Ile Met Ser His Val Pro Leu Tyr Pro Asn Ser Gln Pro Gln
          165          170          175
Val His Leu Val Pro Gly Asn Pro Pro Ser Leu Val Ser Asn Val Asn
          180          185          190
Gly Gln Pro Val Gln Lys Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala
          195          200          205
Ile Gln Ile Ile Ile Gly Leu Ala His Ile Gly Leu Gly Ser Ile Met
          210          215          220
Ala Thr Val Leu Val Gly Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly
          225          230          235          240
Phe Pro Phe Trp Gly Gly Leu Trp Phe Ile Ile Ser Glu Ser Leu Ser
          245          250          255
Val Ala Ala Glu Asn Gln Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser
          260          265          270
Leu Gly Leu Asn Ile Val Ser Ala Ile Cys Ser Ala Val Gly Val Ile
          275          280          285
Leu Phe Ile Thr Asp Leu Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp
          290          295          300
Tyr Tyr Pro Tyr Ala Trp Gly Val Asn Pro Gly Met Ala Ile Ser Gly
          305          310          315          320
Val Leu Leu Val Phe Cys Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser
          325          330          335
Ser His Phe Gly Cys Gln Leu Val Cys Cys Gln Ser Ser Asn Val Ser
          340          345          350
Val Ile Tyr Pro Asn Ile Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu
          355          360          365
Pro Val Thr Ser Pro Pro Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
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<210> 1877
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<213> Homo sapiens

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<211> 6799

<212> DNA

<213> Homo sapiens

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 <211> 91
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<210> 1885
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 1885
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<400> 1888

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 Ser Gly Pro Pro Arg Ala Leu Arg His Leu Lys Pro Pro Ser Gln Pro
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<210> 1889
 <211> 90
 <212> PRT
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<400> 1889
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<210> 1890
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1890
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<210> 1892
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<210> 1895

<211> 884

<212> DNA

<213> Homo sapiens

<400> 1895

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<210> 1896

<211> 787

<212> DNA

<213> Homo sapiens

<400> 1896

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<210> 1897

<211> 1838

<212> DNA

<213> Homo sapiens

<400> 1897

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<210> 1898

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 1898

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<210> 1899

<211> 987

<212> DNA

<213> Homo sapiens

<400> 1899

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<210> 1900
 <211> 2545
 <212> DNA
 <213> Homo sapiens

<400> 1900

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<210> 1901
 <211> 149
 <212> PRT

<213> Homo sapiens

<400> 1901

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Pro Glu Phe Pro Leu Ser Pro Pro Lys Lys Lys Asp Leu Ser Leu Glu
          35          40          45
Glu Ile Gln Lys Lys Leu Glu Ala Ala Glu Glu Arg Arg Lys Ser His
          50          55          60
Glu Ala Glu Val Leu Lys Gln Leu Ala Glu Lys Arg Glu His Glu Lys
65          70          75          80
Glu Val Leu Gln Lys Ala Ile Glu Glu Asn Asn Asn Phe Ser Lys Met
          85          90          95
Ala Glu Glu Lys Leu Thr His Lys Met Glu Ala Asn Lys Glu Asn Arg
          100          105          110
Glu Ala Gln Met Ala Ala Lys Leu Glu Arg Leu Arg Glu Lys Asp Lys
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<210> 1902

<211> 276

<212> PRT

<213> Homo sapiens

<400> 1902

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Leu Thr Glu Ser Glu Lys Arg Pro Phe Ile Asp Glu Ala Lys Arg Leu
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Arg Ala Met His Met Lys Glu His Pro Asp Tyr Lys Tyr Arg Pro Arg
65          70          75          80
Arg Lys Pro Lys Thr Leu Leu Lys Lys Asp Lys Phe Ala Phe Pro Val
          85          90          95
Pro Tyr Gly Leu Gly Gly Val Ala Asp Ala Glu His Pro Ala Leu Lys
          100          105          110
Ala Gly Ala Gly Leu His Ala Gly Ala Gly Gly Gly Leu Val Pro Glu
          115          120          125
Ser Leu Leu Ala Asn Pro Glu Lys Ala Ala Ala Ala Ala Ala Ala
          130          135          140
Ala Ala Arg Val Phe Phe Pro Gln Ser Ala Ala Ala Ala Ala Ala
145          150          155          160
Ala Ala Ala Ala Ala Gly Ser Pro Tyr Ser Leu Leu Asp Leu Gly
          165          170          175
Ser Lys Met Ala Glu Ile Ser Ser Ser Ser Ser Gly Leu Pro Tyr Ala

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<210> 1903
<211> 2209
<212> PRT
<213> Homo sapiens
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<400> 1903															
Met 1	Trp	Asn	Asp	Ile 5	Glu	Leu	Leu	Thr	Asn 10	Asp	Asp	Thr	Gly	Ser 15	Gly
Tyr	Leu	Ser	Val 20	Gly	Ser	Arg	Lys	Glu 25	His	Gly	Thr	Ala	Leu 30	Tyr	Gln
Val	Asp	Leu 35	Leu	Val	Lys	Ile	Ser 40	Ser	Glu	Lys	Ala	Ser 45	Leu	Asn	Pro
Lys	Ile 50	Gln	Ala	Cys	Ser	Leu 55	Ser	Asp	Gly	Phe	Ile 60	Ile	Val	Ala	Asp
Gln 65	Ser	Val	Ile	Leu 70	Leu	Asp	Ser	Ile	Cys	Arg 75	Ser	Leu	Gln	Leu	His
Leu	Val	Phe	Asp 85	Thr	Glu	Val	Asp	Val	Val 90	Gly	Leu	Cys	Gln 95	Glu	Gly
Lys	Phe	Leu 100	Leu	Val	Gly	Glu	Arg	Ser 105	Gly	Asn	Leu	His 110	Leu	Ile	His
Val	Thr	Ser 115	Lys	Gln	Thr	Leu 120	Leu	Thr	Asn	Ala	Phe 125	Val	Gln	Lys	Ala
Asn	Asp 130	Glu	Asn	Arg	Arg	Thr 135	Tyr	Gln	Asn	Leu 140	Val	Ile	Glu	Lys	Asp
Gly 145	Ser	Asn	Glu	Gly 150	Thr	Tyr	Tyr	Met	Leu 155	Leu	Leu	Thr	Tyr	Ser	Gly
Phe	Phe	Cys	Ile 165	Thr	Asn	Leu	Gln	Leu 170	Leu	Lys	Ile	Gln	Gln 175	Ala	Ile
Glu	Asn	Val 180	Asp	Phe	Ser	Thr	Ala 185	Lys	Lys	Leu	Gln	Gly 190	Gln	Ile	Lys
Ser	Ser	Phe 195	Ile	Ser	Thr	Glu	Asn 200	Tyr	His	Thr	Leu 205	Gly	Cys	Leu	Ser
Leu	Val 210	Ala	Gly	Asp	Leu	Ala 215	Ser	Glu	Val	Pro	Val 220	Ile	Ile	Gly	Gly
Thr 225	Gly	Asn	Cys	Ala 230	Phe	Ser	Lys	Trp	Glu	Pro 235	Asp	Ser	Ser	Lys	Lys
Gly	Met	Thr	Val 245	Lys	Asn	Leu	Ile	Asp 250	Ala	Glu	Ile	Ile	Lys 255	Gly	Ala
Lys	Lys	Phe	Gln	Leu	Ile	Asp	Asn	Leu	Leu	Phe	Val	Leu	Asp	Thr	Asp

[illegible]

690	695	700
Lys Leu Ala Leu Ser Asp Phe Glu Lys Glu Asn Thr Thr Thr Ile Val		
705	710	715
Phe Arg Met Phe Asp Lys Val Leu Ala Pro Glu Leu Ile Pro Ser Ile		
	725	730
Leu Glu Lys Phe Ile Arg Val Tyr Met Arg Glu His Asp Leu Gln Glu		
	740	745
Glu Glu Leu Leu Leu Leu Tyr Ile Glu Asp Leu Leu Asn Arg Cys Ser		
	755	760
Ser Lys Ser Thr Ser Leu Phe Glu Thr Ala Trp Glu Ala Lys Ala Met		
	770	775
Ala Val Ile Ala Cys Leu Ser Asp Thr Asp Leu Ile Phe Asp Ala Val		
	785	790
Leu Lys Ile Met Tyr Ala Ala Val Val Pro Trp Ser Ala Ala Val Glu		
	805	810
Gln Leu Val Lys Gln His Leu Glu Met Asp His Pro Lys Val Lys Leu		
	820	825
Leu Gln Glu Ser Tyr Lys Leu Met Glu Met Lys Lys Leu Leu Arg Gly		
	835	840
Tyr Gly Ile Arg Glu Val Asn Leu Leu Asn Lys Glu Ile Met Arg Val		
	850	855
Val Arg Tyr Ile Leu Lys Gln Asp Val Pro Ser Ser Leu Glu Asp Ala		
	865	870
Leu Lys Val Ala Gln Ala Phe Met Leu Ser Asp Asp Glu Ile Tyr Ser		
	885	890
Leu Arg Ile Ile Asp Leu Ile Asp Arg Glu Gln Gly Glu Asp Cys Leu		
	900	905
Leu Leu Leu Lys Ser Leu Pro Pro Ala Glu Ala Glu Lys Thr Ala Glu		
	915	920
Arg Val Ile Ile Trp Ala Arg Leu Ala Leu Gln Glu Glu Pro Asp His		
	930	935
Ser Lys Glu Gly Lys Ala Trp Arg Met Ser Val Ala Lys Thr Ser Val		
	945	950
Asp Ile Leu Lys Ile Leu Cys Asp Ile Gln Lys Asp Asn Leu Gln Lys		
	965	970
Lys Asp Glu Cys Glu Glu Met Leu Lys Leu Phe Lys Glu Val Ala Ser		
	980	985
Leu Gln Glu Asn Phe Glu Val Phe Leu Ser Phe Glu Asp Tyr Ser Asn		
	995	1000
Ser Ser Leu Val Ala Asp Leu Arg Glu Gln His Ile Lys Ala His Glu		
	1010	1015
Val Ala Gln Ala Lys His Lys Pro Gly Ser Thr Pro Glu Pro Ile Ala		
	1025	1030
Ala Glu Val Arg Ser Pro Ser Met Glu Ser Lys Leu His Arg Gln Ala		
	1045	1050
Leu Ala Leu Gln Met Ser Lys Gln Glu Leu Glu Ala Glu Leu Thr Leu		
	1060	1065
Arg Ala Leu Lys Asp Gly Asn Ile Lys Thr Ala Leu Lys Lys Cys Ser		
	1075	1080
Asp Leu Phe Lys Tyr His Cys Asn Ala Asp Thr Gly Lys Leu Leu Phe		
	1090	1095
Leu Thr Cys Gln Lys Leu Cys Gln Met Leu Ala Asp Asn Val Pro Val		
	1105	1110
Thr Val Pro Val Gly Leu Asn Leu Pro Ser Met Ile His Asp Leu Ala		
	1115	1120

1125 1130 1135
 Ser Gln Ala Ala Thr Ile Cys Ser Pro Asp Phe Leu Leu Asp Ala Leu
 1140 1145 1150
 Glu Leu Cys Lys His Thr Leu Met Ala Val Glu Leu Ser Arg Gln Cys
 1155 1160 1165
 Gln Met Asp Asp Cys Gly Ile Leu Met Lys Ala Ser Phe Gly Thr His
 1170 1175 1180
 Lys Asp Pro Tyr Glu Glu Trp Ser Tyr Ser Asp Phe Phe Ser Glu Asp
 1185 1190 1195 1200
 Gly Ile Val Leu Glu Ser Gln Met Val Leu Pro Val Ile Tyr Glu Leu
 1205 1210 1215
 Ile Ser Ser Leu Val Pro Leu Ala Glu Ser Lys Arg Tyr Pro Leu Glu
 1220 1225 1230
 Ser Thr Ser Leu Pro Tyr Cys Ser Leu Asn Glu Gly Asp Gly Leu Val
 1235 1240 1245
 Leu Pro Val Ile Asn Ser Ile Ser Ala Leu Leu Gln Asn Leu Gln Glu
 1250 1255 1260
 Ser Ser Gln Trp Glu Leu Ala Leu Arg Phe Val Val Gly Ser Phe Gly
 1265 1270 1275 1280
 Thr Cys Leu Gln His Ser Val Ser Asn Phe Met Asn Ala Thr Leu Ser
 1285 1290 1295
 Glu Lys Leu Phe Gly Glu Thr Thr Leu Val Lys Ser Arg His Val Val
 1300 1305 1310
 Met Glu Leu Lys Glu Lys Ala Val Ile Phe Ile Arg Glu Asn Ala Thr
 1315 1320 1325
 Thr Leu Leu His Lys Val Phe Asn Cys Arg Leu Val Asp Leu Asp Leu
 1330 1335 1340
 Ala Leu Gly Tyr Cys Thr Leu Leu Pro Gln Lys Asp Val Phe Glu Asn
 1345 1350 1355 1360
 Leu Trp Lys Leu Ile Asp Lys Ala Trp Gln Asn Tyr Asp Lys Ile Leu
 1365 1370 1375
 Ala Ile Ser Leu Val Gly Ser Glu Leu Ala Ser Leu Tyr Gln Glu Ile
 1380 1385 1390
 Glu Met Gly Leu Lys Phe Arg Glu Leu Ser Thr Asp Ala Gln Trp Gly
 1395 1400 1405
 Ile Arg Leu Gly Lys Leu Gly Ile Ser Phe Gln Pro Val Phe Arg Gln
 1410 1415 1420
 His Phe Leu Thr Lys Lys Asp Leu Ile Lys Ala Leu Val Glu Asn Ile
 1425 1430 1435 1440
 Asp Met Asp Thr Ser Leu Ile Leu Glu Tyr Cys Ser Thr Phe Gln Leu
 1445 1450 1455
 Asp Cys Asp Ala Val Leu Gln Leu Phe Ile Glu Thr Leu Leu His Asn
 1460 1465 1470
 Thr Asn Ala Gly Gln Gly Gln Gly Asp Ala Ser Met Asp Ser Ala Lys
 1475 1480 1485
 Arg Arg His Pro Lys Leu Leu Ala Lys Ala Leu Glu Met Val Pro Leu
 1490 1495 1500
 Leu Thr Ser Thr Lys Asp Leu Val Ile Ser Leu Ser Gly Ile Leu His
 1505 1510 1515 1520
 Lys Leu Asp Pro Tyr Asp Tyr Glu Met Ile Glu Val Val Leu Lys Val
 1525 1530 1535
 Ile Glu Arg Ala Asp Glu Lys Ile Thr Asn Ile Asn Ile Asn Gln Ala
 1540 1545 1550
 Leu Ser Ile Leu Lys His Leu Lys Ser Tyr Arg Arg Ile Ser Pro Pro

1555	1560	1565
Val Asp Leu Glu Tyr Gln Tyr Met Leu Glu His Val Ile Thr Leu Pro		
1570	1575	1580
Ser Ala Ala Gln Thr Arg Leu Pro Phe His Leu Ile Phe Phe Gly Thr		
1585	1590	1595
Ala Gln Asn Phe Trp Lys Ile Leu Ser Thr Glu Leu Ser Glu Glu Ser		1600
	1605	1610
Phe Pro Thr Leu Leu Leu Ile Ser Lys Leu Met Lys Phe Ser Leu Asp		1615
	1620	1625
Thr Leu Tyr Val Ser Thr Ala Lys His Val Phe Glu Lys Lys Leu Lys		1630
	1635	1640
Pro Lys Leu Leu Lys Leu Thr Gln Ala Lys Ser Ser Thr Leu Ile Asn		1645
	1650	1655
Lys Glu Ile Thr Lys Ile Thr Gln Thr Ile Glu Ser Cys Leu Leu Ser		1660
1665	1670	1675
Ile Val Asn Pro Glu Trp Ala Val Ala Ile Ala Ile Ser Leu Ala Gln		1680
	1685	1690
Asp Ile Pro Glu Gly Ser Phe Lys Ile Ser Ala Leu Lys Phe Cys Leu		1695
	1700	1705
Tyr Leu Ala Glu Arg Trp Leu Gln Asn Ile Pro Ser Gln Asp Glu Lys		1710
	1715	1720
Arg Glu Lys Ala Glu Ala Leu Leu Lys Lys Leu His Ile Gln Tyr Arg		1725
	1730	1735
Arg Ser Gly Thr Glu Ala Val Leu Ile Ala His Lys Leu Asn Thr Glu		1740
1745	1750	1755
Glu Tyr Leu Arg Val Ile Gly Lys Pro Ala His Leu Ile Val Ser Leu		1760
	1765	1770
Tyr Glu His Pro Ser Ile Asn Gln Arg Ile Gln Asn Ser Ser Gly Thr		1775
	1780	1785
Asp Tyr Pro Asp Ile His Ala Ala Ala Lys Glu Ile Ala Glu Val Asn		1790
	1795	1800
Glu Ile Asn Leu Glu Lys Val Trp Asp Met Leu Leu Glu Lys Trp Leu		1805
	1810	1815
Cys Pro Ser Thr Lys Pro Gly Glu Lys Pro Ser Glu Leu Phe Glu Leu		1820
1825	1830	1835
Gln Glu Asp Glu Ala Leu Arg Arg Val Gln Tyr Leu Leu Leu Ser Arg		1840
	1845	1850
Pro Ile Asp Tyr Ser Ser Arg Met Leu Phe Val Phe Ala Thr Ser Thr		1855
	1860	1865
Thr Thr Thr Leu Gly Met His Gln Leu Thr Phe Ala His Arg Thr Arg		1870
	1875	1880
Ala Leu Gln Cys Leu Phe Tyr Leu Ala Asp Lys Glu Thr Ile Glu Ser		1885
	1890	1895
Leu Phe Lys Lys Pro Ile Glu Glu Val Lys Ser Tyr Leu Arg Cys Ile		1900
1905	1910	1915
Thr Phe Leu Ala Ser Phe Glu Thr Leu Asn Ile Pro Ile Thr Tyr Glu		1920
	1925	1930
Leu Phe Cys Ser Ser Pro Lys Glu Gly Met Ile Lys Gly Leu Trp Lys		1935
	1940	1945
Asn His Ser His Glu Ser Met Ala Val Arg Leu Val Thr Glu Leu Cys		1950
	1955	1960
Leu Glu Tyr Lys Ile Tyr Asp Leu Gln Leu Trp Asn Gly Leu Leu Gln		1965
	1970	1975
Lys Leu Leu Gly Phe Asn Met Ile Pro Tyr Leu Arg Lys Val Leu Lys		1980


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<210> 1905
<211> 202
<212> PRT
<213> Homo sapiens
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<210> 1906
<211> 464
<212> PRT
<213> Homo sapiens
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<400> 1906
Met Glu Thr Leu Ser Phe Pro Arg Tyr Asn Ile Ala Glu Ile Val Val
  1                      5          10          15
His Ile Arg Asn Lys Leu Leu Thr Gly Ala Asp Gly Lys Asn Leu Ser

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20 25 30
 Lys Ser Asp Phe Leu Pro Asn Pro Lys Pro Glu Val Leu Tyr Met Ile
 35 40 45
 Tyr Met Arg Ala Leu Gln Leu Val Tyr Gly Val Arg Leu Glu His Phe
 50 55 60
 Tyr Met Met Pro Val Asn Ile Glu Val Met Tyr Pro His Ile Met Glu
 65 70 75 80
 Gly Phe Leu Pro Val Ser Asn Leu Phe Phe His Leu Asp Ser Phe Met
 85 90 95
 Pro Ile Cys Arg Val Asn Asp Phe Glu Ile Ala Asp Ile Leu Tyr Pro
 100 105 110
 Lys Ala Asn Arg Thr Ser Arg Phe Leu Ser Gly Ile Ile Asn Phe Ile
 115 120 125
 His Phe Arg Glu Thr Cys Leu Glu Lys Tyr Glu Glu Phe Leu Leu Gln
 130 135 140
 Asn Lys Ser Ser Val Asp Lys Ile Gln Gln Leu Ser Asn Ala His Gln
 145 150 155 160
 Glu Ala Leu Met Lys Leu Glu Lys Leu Asn Ser Val Pro Val Glu Glu
 165 170 175
 Gln Glu Glu Phe Lys Gln Leu Lys Asp Asp Ile Gln Glu Leu Gln His
 180 185 190
 Leu Leu Asn Gln Asp Phe Arg Gln Lys Thr Thr Leu Leu Gln Glu Arg
 195 200 205
 Tyr Thr Lys Met Lys Ser Asp Phe Ser Glu Lys Thr Lys His Val Asn
 210 215 220
 Glu Leu Lys Leu Ser Val Val Ser Leu Lys Glu Val Gln Asp Ser Leu
 225 230 235 240
 Lys Ser Lys Ile Val Asp Ser Pro Glu Lys Leu Lys Asn Tyr Lys Glu
 245 250 255
 Lys Met Lys Asp Thr Val Gln Lys Leu Arg Ser Ala Arg Glu Glu Val
 260 265 270
 Met Glu Lys Tyr Asp Ile Tyr Arg Asp Ser Val Asp Cys Leu Pro Ser
 275 280 285
 Cys Gln Leu Glu Val Gln Leu Tyr Gln Lys Lys Ser Gln Asp Leu Ala
 290 295 300
 Asp Asn Arg Glu Lys Leu Ser Ser Ile Leu Lys Glu Ser Leu Asn Leu
 305 310 315 320
 Glu Gly Gln Ile Asp Ser Asp Ser Ser Glu Leu Lys Lys Leu Lys Thr
 325 330 335
 Glu Glu Asn Ser Leu Ile Arg Leu Met Thr Leu Lys Lys Glu Arg Leu
 340 345 350
 Ala Thr Met Gln Phe Lys Ile Asn Lys Lys Gln Glu Asp Val Lys Gln
 355 360 365
 Tyr Lys Arg Thr Met Ile Glu Asp Cys Asn Lys Val Gln Glu Lys Arg
 370 375 380
 Asp Ala Val Cys Glu Gln Val Thr Ala Ile Asn Gln Asp Ile His Lys
 385 390 395 400
 Ile Lys Ser Gly Ile Gln Gln Leu Arg Asp Ala Glu Lys Arg Glu Lys
 405 410 415
 Leu Lys Ser Gln Glu Ile Leu Val Asp Leu Lys Ser Ala Leu Glu Lys
 420 425 430
 Tyr His Glu Gly Ile Glu Lys Thr Thr Glu Glu Cys Cys Thr Arg Ile
 435 440 445
 Gly Gly Lys Thr Ala Glu Leu Lys Arg Arg Met Phe Lys Met Pro Pro

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450

455

460

<210> 1907
 <211> 168
 <212> PRT
 <213> Homo sapiens

<400> 1907
 Met Ala Glu Pro Trp Gly Asn Glu Leu Ala Ser Ala Ala Ala Arg Gly
 1 5 10 15
 Asp Leu Glu Gln Leu Thr Ser Leu Leu Gln Asn Asn Val Asn Val Asn
 20 25 30
 Ala Gln Asn Gly Phe Gly Arg Thr Ala Leu Gln Val Met Lys Leu Gly
 35 40 45
 Asn Pro Glu Ile Ala Arg Arg Leu Leu Leu Arg Gly Ala Asn Pro Asp
 50 55 60
 Leu Lys Asp Arg Thr Gly Phe Ala Val Ile His Asp Ala Ala Arg Ala
 65 70 75 80
 Gly Phe Leu Asp Thr Leu Gln Thr Leu Leu Glu Phe Gln Ala Asp Val
 85 90 95
 Asn Ile Glu Asp Asn Glu Gly Asn Leu Pro Leu His Leu Ala Ala Lys
 100 105 110
 Glu Gly His Leu Arg Val Val Glu Phe Leu Val Lys His Thr Ala Ser
 115 120 125
 Asn Val Gly His Arg Asn His Lys Gly Asp Thr Ala Cys Asp Leu Ala
 130 135 140
 Arg Leu Tyr Gly Arg Asn Glu Val Val Ser Leu Met Gln Ala Asn Gly
 145 150 155 160
 Ala Gly Gly Ala Thr Asn Leu Gln
 165

<210> 1908
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 1908
 Met Glu Pro Ala Ala Gly Ser Ser Met Glu Pro Ser Ala Asp Trp Leu
 1 5 10 15
 Ala Thr Ala Ala Ala Arg Gly Arg Val Glu Glu Val Arg Ala Leu Leu
 20 25 30
 Glu Ala Gly Ala Leu Pro Asn Ala Pro Asn Ser Tyr Gly Arg Arg Pro
 35 40 45
 Ile Gln Val Met Met Met Gly Ser Ala Arg Val Ala Glu Leu Leu Leu
 50 55 60
 Leu His Gly Ala Glu Pro Asn Cys Ala Asp Pro Ala Thr Leu Thr Arg
 65 70 75 80
 Pro Val His Asp Ala Ala Arg Glu Gly Phe Leu Asp Thr Leu Val Val
 85 90 95
 Leu His Arg Ala Gly Ala Arg Leu Asp Val Arg Asp Ala Trp Gly Arg
 100 105 110
 Leu Pro Val Asp Leu Ala Glu Glu Leu Gly His Arg Asp Val Ala Arg

115 120 125
 Tyr Leu Arg Ala Ala Ala Gly Gly Thr Arg Gly Ser Asn His Ala Arg
 130 135 140
 Ile Asp Ala Ala Glu Gly Pro Ser Asp Ile Pro Asp
 145 150 155

<210> 1909
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1909
 Met Lys Lys Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val
 1 5 10 15
 Leu Ile Gly Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser
 20 25 30
 Cys Ile Ser Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp
 35 40 45
 Leu Lys Gln Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile
 50 55 60
 Ala Thr Leu Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala
 65 70 75 80
 Asp Val Lys Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys
 85 90 95
 Lys Lys Gln Lys Asn Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys
 100 105 110
 Val Arg Lys Ser Gln Arg Ser Arg Gln Lys Lys Thr Thr
 115 120 125

<210> 1910
 <211> 931
 <212> DNA
 <213> Homo sapiens

<400> 1910
 caacagtcag aggtcgcgca ggcgctggta ccccgttggt ccgcgcgttg ctgcgttggtg 60
 aggggtgtca gctcagtgca tcccaggcag ctcttagtgt ggagcagtga actgtgtgtg 120
 gttccttcta cttggggatc atgcagagag cttcrcgtct gaagagagag ctgcacatgt 180
 tagccacaga gccaccccca ggcatacat gttggcaaga taaagaccaa atggatgacc 240
 tgcgagctca aatattaggt ggagccaaca caccttatga gaaagggtgtt tttaagctag 300
 aagttatcat tcctgagagg taccattttg aacctcctca gatccgattt ctcaactcaa 360
 tttatcatcc aaacattgat tctgctggaa ggatttgtct ggatgttctc aaattgccac 420
 caaaagggtgc ttggagacca tccctcaaca tcgcaactgt gttgacctct attcagctgc 480
 tcatgtcaga acccaaccct gatgaccgcg tcatggctga catatcctca gaatttaa 540
 ataataagcc agccttcctc aagaatgcc aacagtgac agagaagcat gcaagacaga 600
 aacaaaaggc tgatgaggaa gagatgcttg ataactacc agaggctggt gactccagag 660
 tacacaactc aacacagaaa aggaaggcca ctcagctagt aggcatagaa aagaaatttc 720
 atcctgatgt ttacgggact tgtcctgggt catcttagtt aatgtgttct ttgccaaggt 780
 gatctaagtt gcctaccttg aatttttttt taaatatatt tgatgacata atttttgtgt 840
 agtttattta tcttgtacat atgtattttg aaatctttta aacctgaaaa ataaatagtc 900
 atttaatggt gaaaaaaaaa aaaaaaaaaa a 931

<220>
<223> PCR primer

27

<220>
<223> PCR primer

37

<400>	1913														
Met	Gln	His	His	His	His	His	His	Ala	Lys	Gly	Asp	Pro	Lys	Lys	Pro
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Lys	Gly	Lys	Met	Ser	Ala	Tyr	Ala	Phe	Phe	Val	Gln	Thr	Cys	Arg	Glu
			20					25					30		
Glu	His	Lys	Lys	Lys	Asn	Pro	Glu	Val	Pro	Val	Asn	Phe	Ala	Glu	Phe
		35					40					45			
Ser	Lys	Lys	Cys	Ser	Glu	Arg	Trp	Lys	Thr	Met	Ser	Gly	Lys	Glu	Lys
	50					55					60				
Ser	Lys	Phe	Asp	Glu	Met	Ala	Lys	Ala	Asp	Lys	Val	Arg	Tyr	Asp	Arg
65					70					75					80
Glu	Met	Lys	Asp	Tyr	Gly	Pro	Ala	Lys	Gly	Gly	Lys	Lys	Lys	Lys	Asp
				85					90					95	
Pro	Asn	Ala	Pro	Lys	Arg	Pro	Pro	Ser	Gly	Phe	Phe	Leu	Phe	Cys	Ser
			100					105					110		
Glu	Phe	Arg	Pro	Lys	Ile	Lys	Ser	Thr	Asn	Pro	Gly	Ile	Ser	Ile	Gly
	115						120					125			
Asp	Val	Ala	Lys	Lys	Leu	Gly	Glu	Met	Trp	Asn	Asn	Leu	Asn	Asp	Ser
	130					135					140				
Glu	Lys	Gln	Pro	Tyr	Ile	Thr	Lys	Ala	Ala	Lys	Leu	Lys	Glu	Lys	Tyr
145					150					155					160
Glu	Lys	Asp	Val	Ala	Asp	Tyr	Lys	Ser	Lys	Gly	Lys	Phe	Asp	Gly	Ala
				165					170					175	
Lys	Gly	Pro	Ala	Lys	Val	Ala	Arg	Lys	Lys	Val	Glu	Glu	Glu	Asp	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu		
		195					200					205			

<210> 1914
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1914
 atgcagcatc accaccatca ccacgctaaa ggtgacccca agaaaccaa gggcaagatg 60
 tccgcttatg ccttctttgt gcagacatgc agagaagaac ataagaagaa aaaccagag 120
 gtccctgtca attttgcgga attttccaag aagtgtcttg agagggtggaa gacgatgtcc 180
 gggaaagaga aatctaaatt tgatgaaatg gcaaaggcag ataaagtgcg ctatgatcgg 240
 gaaatgaagg attatggacc agctaaggga ggcaagaaga agaaggatcc taatgctccc 300
 aaaaggccac cgtctggatt ctctctgttc tgttcagaat tccgccccaa gatcaaatcc 360
 acaaaccctg gcatctctat tggagacgtg gcaaaaaagc tgggtgagat gtggaataat 420
 ttaaattgaca gtgaaaagca gccttacatc actaaggcgg caaagctgaa ggagaagtat 480
 gagaaggatg ttgctgacta taagtcgaaa ggaaagtttg atggtgcaaa ggggccagct 540
 aaagttgccc ggaaaaaggt ggaagaggaa gatgaagaag aggaggagga agaagaggag 600
 gaggaggagg aggaggatga ataa 624

<210> 1915
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1915
 gtgacgatgg aggagctgcg ggagatgg 28

<210> 1916
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1916
 cgcctaactc gactcactaa cagctgggag 30

<210> 1917
 <211> 401
 <212> PRT
 <213> Homo sapiens

<400> 1917
 Met Gln His His His His His Val Thr Met Glu Glu Leu Arg Glu
 1 5 10 15
 Met Asp Cys Ser Val Leu Lys Arg Leu Met Asn Arg Asp Glu Asn Gly
 20 25 30
 Gly Gly Ala Gly Gly Ser Gly Ser His Gly Thr Leu Gly Leu Pro Ser
 35 40 45

Gly Gly Lys Cys Leu Leu Leu Asp Cys Arg Pro Phe Leu Ala His Ser
 50 55 60
 Ala Gly Tyr Ile Leu Gly Ser Val Asn Val Arg Cys Asn Thr Ile Val
 65 70 75 80
 Arg Arg Arg Ala Lys Gly Ser Val Ser Leu Glu Gln Ile Leu Pro Ala
 85 90 95
 Glu Glu Glu Val Arg Ala Arg Leu Arg Ser Gly Leu Tyr Ser Ala Val
 100 105 110
 Ile Val Tyr Asp Glu Arg Ser Pro Arg Ala Glu Ser Leu Arg Glu Asp
 115 120 125
 Ser Thr Val Ser Leu Val Val Gln Ala Leu Arg Arg Asn Ala Glu Arg
 130 135 140
 Thr Asp Ile Cys Leu Leu Lys Gly Gly Tyr Glu Arg Phe Ser Ser Glu
 145 150 155 160
 Tyr Pro Glu Phe Cys Ser Lys Thr Lys Ala Leu Ala Ala Ile Pro Pro
 165 170 175
 Pro Val Pro Pro Ser Ala Thr Glu Pro Leu Asp Leu Gly Cys Ser Ser
 180 185 190
 Cys Gly Thr Pro Leu His Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
 195 200 205
 Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ala Arg Arg Asp Met Leu
 210 215 220
 Asp Ala Leu Gly Ile Thr Ala Leu Leu Asn Val Ser Ser Asp Cys Pro
 225 230 235 240
 Asn His Phe Glu Gly His Tyr Gln Tyr Lys Cys Ile Pro Val Glu Asp
 245 250 255
 Asn His Lys Ala Asp Ile Ser Ser Trp Phe Met Glu Ala Ile Glu Tyr
 260 265 270
 Ile Asp Ala Val Lys Asp Cys Arg Gly Arg Val Leu Val His Cys Gln
 275 280 285
 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Met Met
 290 295 300
 Lys Lys Arg Val Arg Leu Glu Glu Ala Phe Glu Phe Val Lys Gln Arg
 305 310 315 320
 Arg Ser Ile Ile Ser Pro Asn Phe Ser Phe Met Gly Gln Leu Leu Gln
 325 330 335
 Phe Glu Ser Gln Val Leu Ala Thr Ser Cys Ala Ala Glu Ala Ala Ser
 340 345 350
 Pro Ser Gly Pro Leu Arg Glu Arg Gly Lys Thr Pro Ala Thr Pro Thr
 355 360 365
 Ser Gln Phe Val Phe Ser Phe Pro Val Ser Val Gly Val His Ser Ala
 370 375 380
 Pro Ser Ser Leu Pro Tyr Leu His Ser Pro Ile Thr Thr Ser Pro Ser
 385 390 395 400
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<210> 1918

<211> 1209

<212> DNA

<213> Homo sapiens

<400> 1918

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<210> 1919

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1919

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23

<210> 1920

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1920

ctgagaattc attaaacttg tggttgctct tcacc

35

<210> 1921

<211> 167

<212> PRT

<213> Homo sapiens

<400> 1921

Met Gln His His His His His His Arg Cys His Ala His Gly Pro Ser

1

5

10

15

Cys Leu Val Thr Ala Ile Thr Arg Glu Glu Gly Gly Pro Arg Ser Gly

20

25

30

Gly Ala Gln Ala Lys Leu Gly Cys Cys Trp Gly Tyr Pro Ser Pro Arg
 35 40 45
 Ser Thr Trp Asn Pro Asp Arg Arg Phe Trp Thr Pro Gln Thr Gly Pro
 50 55 60
 Gly Glu Gly Arg His Glu Arg His Thr Gln Thr Gln Asn His Thr Ala
 65 70 75 80
 Ser Pro Arg Ser Pro Val Met Glu Ser Pro Lys Lys Lys Asn Gln Gln
 85 90 95
 Leu Lys Val Gly Ile Leu His Leu Gly Ser Arg Gln Lys Lys Ile Arg
 100 105 110
 Ile Gln Leu Arg Ser Gln Cys Ala Thr Trp Lys Val Ile Cys Lys Ser
 115 120 125
 Cys Ile Ser Gln Thr Pro Gly Ile Asn Leu Asp Leu Gly Ser Gly Val
 130 135 140
 Lys Val Lys Ile Ile Pro Lys Glu Glu His Cys Lys Met Pro Glu Ala
 145 150 155 160
 Gly Glu Glu Gln Pro Gln Val
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<210> 1922

<211> 507

<212> DNA

<213> Homo sapiens

<400> 1922

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<210> 1923

<211> 3192

<212> DNA

<213> Homo sapiens

<400> 1923

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agaagagtgt ccagaggata ccaatgccag atgcatcttg agttacactc agcactcgca 180
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tgaactctct accatgaaca tggttctcgg cttatgaagg aattttaagt aaaacagtta 360
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cacaggagtt atcaggattt ttctggcacc aagtttaatt cttcttcgta cttctggtag 480
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acctctggaa gcagcatcag gacagcagag cagagccccc gtccctactg ctcaattgca 600
cagaaactcc atctggactc ggatgctttt actgaagacc catctagctt caatcatctt 660
tagagtccat ccattctgga gagacctggc gtttgagctt gcctcctgtg gccgtgtttt 720
  
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cagagctgct gcactgggct ttggatttgt tcttgtgagt aaataaaaact ggctggtgaa 3180
tgaaaaaaa aa 3192

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<210> 1924

<211> 2048

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 787, 1453, 1521, 1727

<223> n = A,T,C or G

<400> 1924

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<210> 1925

<211> 456

<212> PRT

<213> Homo sapiens

<400> 1925

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			20					25					30		
Pro	Ala	Ile	Phe	Gly	Val	Ser	Phe	Gly	Ile	Arg	Lys	Leu	Tyr	Met	Lys
			35				40					45			
Ser	Leu	Leu	Lys	Ile	Phe	Ala	Trp	Ala	Thr	Leu	Arg	Met	Glu	Arg	Gly
			50			55					60				
Ala	Lys	Glu	Lys	Asn	His	Gln	Leu	Tyr	Lys	Pro	Tyr	Thr	Asn	Gly	Ile
65					70				75					80	
Ile	Ala	Lys	Asp	Pro	Thr	Ser	Leu	Glu	Glu	Glu	Ile	Lys	Glu	Ile	Arg
				85					90					95	

Arg Ser Gly Ser Ser Lys Ala Leu Asp Asn Thr Pro Glu Phe Glu Leu
 100 105 110
 Ser Asp Ile Phe Tyr Phe Cys Arg Lys Gly Met Glu Thr Ile Met Asp
 115 120 125
 Asp Glu Val Thr Lys Arg Phe Ser Ala Glu Glu Leu Glu Ser Trp Asn
 130 135 140
 Leu Leu Ser Arg Thr Asn Tyr Asn Phe Gln Tyr Ile Ser Leu Arg Leu
 145 150 155 160
 Thr Val Leu Trp Gly Leu Gly Val Leu Ile Arg Tyr Cys Phe Leu Leu
 165 170 175
 Pro Leu Arg Ile Ala Leu Ala Phe Thr Gly Ile Ser Leu Leu Val Val
 180 185 190
 Gly Thr Thr Val Val Gly Tyr Leu Pro Asn Gly Arg Phe Lys Glu Phe
 195 200 205
 Met Ser Lys His Val His Leu Met Cys Tyr Arg Ile Cys Val Arg Ala
 210 215 220
 Leu Thr Ala Ile Ile Thr Tyr His Asp Arg Glu Asn Arg Pro Arg Asn
 225 230 235 240
 Gly Gly Ile Cys Val Ala Asn His Thr Ser Pro Ile Asp Val Ile Ile
 245 250 255
 Leu Ala Ser Asp Gly Tyr Tyr Ala Met Val Gly Gln Val His Gly Gly
 260 265 270
 Leu Met Gly Val Ile Gln Arg Ala Met Val Lys Ala Cys Pro His Val
 275 280 285
 Trp Phe Glu Arg Ser Glu Val Lys Asp Arg His Leu Val Ala Lys Arg
 290 295 300
 Leu Thr Glu His Val Gln Asp Lys Ser Lys Leu Pro Ile Leu Ile Phe
 305 310 315 320
 Pro Glu Gly Thr Cys Ile Asn Asn Thr Ser Val Met Met Phe Lys Lys
 325 330 335
 Gly Ser Phe Glu Ile Gly Ala Thr Val Tyr Pro Val Ala Ile Lys Tyr
 340 345 350
 Asp Pro Gln Phe Gly Asp Ala Phe Trp Asn Ser Ser Lys Tyr Gly Met
 355 360 365
 Val Thr Tyr Leu Leu Arg Met Met Thr Ser Trp Ala Ile Val Cys Ser
 370 375 380
 Val Trp Tyr Leu Pro Pro Met Thr Arg Glu Ala Asp Glu Asp Ala Val
 385 390 395 400
 Gln Phe Ala Asn Arg Val Lys Ser Ala Ile Ala Arg Gln Gly Gly Leu
 405 410 415
 Val Asp Leu Leu Trp Asp Gly Gly Leu Lys Arg Glu Lys Val Lys Asp
 420 425 430
 Thr Phe Lys Glu Glu Gln Gln Lys Leu Tyr Ser Lys Met Ile Val Gly
 435 440 445
 Asn His Lys Asp Arg Ser Arg Ser
 450 455

<210> 1926

<211> 324

<212> PRT

<213> Homo sapiens

<400> 1926

Met Gly Pro Trp Gly Glu Pro Glu Leu Leu Val Trp Arg Pro Glu Ala
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 Val Ala Ser Glu Pro Pro Val Pro Val Gly Leu Glu Val Lys Leu Gly
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 Ala Leu Val Leu Leu Leu Val Leu Thr Leu Leu Cys Ser Leu Gly Ser
 35 40 45
 Ile Gly Val Leu Arg Arg Thr Gly Ala Asn His Glu Gly Ser Ala Ser
 50 55 60
 Arg Gln Lys Ala Leu Ser Leu Val Ser Cys Phe Ala Gly Gly Val Phe
 65 70 75 80
 Leu Ala Thr Cys Leu Leu Asp Leu Leu Pro Asp Tyr Leu Ala Ala Ile
 85 90 95
 Asp Glu Ala Leu Ala Ala Leu His Val Thr Leu Gln Phe Pro Leu Gln
 100 105 110
 Glu Phe Ile Leu Ala Met Gly Phe Phe Leu Val Leu Val Met Glu Gln
 115 120 125
 Ile Thr Leu Ala Tyr Lys Glu Gln Ser Gly Pro Ser Pro Leu Glu Glu
 130 135 140
 Thr Arg Ala Leu Leu Gly Thr Val Asn Gly Gly Pro Gln His Trp His
 145 150 155 160
 Asp Gly Pro Gly Val Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser
 165 170 175
 Ala Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val
 180 185 190
 Phe Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met
 195 200 205
 Glu Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser
 210 215 220
 Leu Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala
 225 230 235 240
 Gly Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu
 245 250 255
 Gly Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln
 260 265 270
 Ser Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe
 275 280 285
 Leu Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu
 290 295 300
 Lys Val Ile Leu Leu Leu Ala Gly Phe Ala Leu Leu Thr Gly Leu Leu
 305 310 315 320
 Phe Ile Gln Ile

<210> 1927

<211> 15

<212> PRT

<213> Homo sapiens

<400> 1927

Gly Pro Arg Ser Gly Gly Ala Gln Ala Lys Leu Gly Cys Cys Trp
 1 5 10 15

<210> 1928
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1928
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 1 5 10 15
 Asp Leu Gly Ser
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<210> 1929
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1929
 Ile Ile Pro Lys Glu Glu His Cys Lys Met Pro Glu Ala Gly Glu Glu
 1 5 10 15
 Gln Pro Gln Val
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<210> 1930
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 1930
 Leu Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala
 1 5 10 15
 Trp Phe Gly Val Asn Pro Gly Met
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<210> 1931
 <211> 1526
 <212> DNA
 <213> Homo sapiens

<400> 1931
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 ggtgaatgac tttgagactg ctgatattct atgtccaaaa gcaaaacgga caagtcggtt 180
 ttttaagtggc attatcaact ttattcactt cagagaagca tgccgtgaaa cgtatatgga 240
 atttcttttg caatataaat cctctgcgga caaaatgcaa cagttaaagc ccgcacacca 300
 ggaggcatta atgaaactgg agagacttga ttctgttcca gttgaagagc aagaagagtt 360
 caagcagctt tcagatggaa ttcaggagct acaacaatca ctaaatcagg attttcatca 420
 aaaaacgata gtgctgcaag agggaaattc ccaaaagaag tcaaataattt cagagaaaac 480
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 tacgggtccag aagcttaaaa atgccagaca agaagtgggt gagaaatatg aaatctatgg 660
 agactcagtt gactgcctgc cttcatgtca gttggaagtg cagttatatc aaaagaaaaat 720

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tgttaaaaaaa aaaaaaaaaa aaaaaa 1526

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<210> 1932

<211> 404

<212> PRT

<213> Homo sapiens

<400> 1932

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His Leu Met Glu Gly Phe Leu Pro Phe Ser Asn Leu Val Thr His Leu
          20          25          30
Asp Ser Phe Leu Pro Ile Cys Arg Val Asn Asp Phe Glu Thr Ala Asp
          35          40          45
Ile Leu Cys Pro Lys Ala Lys Arg Thr Ser Arg Phe Leu Ser Gly Ile
          50          55          60
Ile Asn Phe Ile His Phe Arg Glu Ala Cys Arg Glu Thr Tyr Met Glu
        65          70          75          80
Phe Leu Trp Gln Tyr Lys Ser Ser Ala Asp Lys Met Gln Gln Leu Asn
          85          90          95
Ala Ala His Gln Glu Ala Leu Met Lys Leu Glu Arg Leu Asp Ser Val
          100          105          110
Pro Val Glu Glu Gln Glu Glu Phe Lys Gln Leu Ser Asp Gly Ile Gln
          115          120          125
Glu Leu Gln Gln Ser Leu Asn Gln Asp Phe His Gln Lys Thr Ile Val
          130          135          140
Leu Gln Glu Gly Asn Ser Gln Lys Lys Ser Asn Ile Ser Glu Lys Thr
        145          150          155          160
Lys Arg Leu Asn Glu Leu Lys Leu Leu Val Val Ser Leu Lys Glu Ile
          165          170          175
Gln Glu Ser Leu Lys Thr Lys Ile Val Asp Ser Pro Glu Lys Leu Lys
          180          185          190
Asn Tyr Lys Glu Lys Met Lys Asp Thr Val Gln Lys Leu Lys Asn Ala
          195          200          205
Arg Gln Glu Val Val Glu Lys Tyr Glu Ile Tyr Gly Asp Ser Val Asp
          210          215          220
Cys Leu Pro Ser Cys Gln Leu Glu Val Gln Leu Tyr Gln Lys Lys Ile
        225          230          235          240
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<211> 464

<212> PRT

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<400> 1934

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Lys Asn Asp Leu Tyr Pro Asn Pro Lys Pro Glu Val Leu His Met Ile
35     40     45
Tyr Met Arg Ala Leu Gln Ile Val Tyr Gly Ile Arg Leu Glu His Phe
50     55     60
Tyr Met Met Pro Val Asn Ser Glu Val Met Tyr Pro His Leu Met Glu
65     70     75     80
Gly Phe Leu Pro Phe Ser Asn Leu Val Thr His Leu Asp Ser Phe Leu
85     90     95
Pro Ile Cys Arg Val Asn Asp Phe Glu Thr Ala Asp Ile Leu Cys Pro
100    105    110
Lys Ala Lys Arg Thr Ser Arg Phe Leu Ser Gly Ile Ile Asn Phe Ile
115    120    125
His Phe Arg Glu Ala Cys Arg Glu Thr Tyr Met Glu Phe Leu Trp Gln
130    135    140
Tyr Lys Ser Ser Ala Asp Lys Met Gln Gln Leu Asn Ala Ala His Gln
145    150    155    160
Glu Ala Leu Met Lys Leu Glu Arg Leu Asp Ser Val Pro Val Glu Glu
165    170    175
Gln Glu Glu Phe Lys Gln Leu Ser Asp Gly Ile Gln Glu Leu Gln Gln
180    185    190
Ser Leu Asn Gln Asp Phe His Gln Lys Thr Ile Val Leu Gln Glu Gly
195    200    205
Asn Ser Gln Lys Lys Ser Asn Ile Ser Glu Lys Thr Lys Arg Leu Asn
210    215    220
Glu Leu Lys Leu Leu Val Val Ser Leu Lys Glu Ile Gln Glu Ser Leu
225    230    235    240
Lys Thr Lys Ile Val Asp Ser Pro Glu Lys Leu Lys Asn Tyr Lys Glu
245    250    255
Lys Met Lys Asp Thr Val Gln Lys Leu Lys Asn Ala Arg Gln Glu Val
260    265    270
Val Glu Lys Tyr Glu Ile Tyr Gly Asp Ser Val Asp Cys Leu Pro Ser
275    280    285
Cys Gln Leu Glu Val Gln Leu Tyr Gln Lys Lys Ile Gln Asp Leu Ser
290    295    300
Asp Asn Arg Glu Lys Leu Ala Ser Ile Leu Lys Glu Ser Leu Asn Leu
305    310    315    320
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325    330    335
Glu Glu Asn Ser Phe Lys Arg Leu Met Ile Val Lys Lys Glu Lys Leu

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

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          355          360          365
Tyr Lys Arg Thr Val Ile Glu Asp Cys Asn Lys Val Gln Glu Lys Arg
          370          375          380
Gly Ala Val Tyr Glu Arg Val Thr Thr Ile Asn Gln Glu Ile Gln Lys
385          390          395          400
Ile Lys Leu Gly Ile Gln Gln Leu Lys Asp Ala Ala Glu Arg Glu Lys
          405          410          415
Leu Lys Ser Gln Glu Ile Phe Leu Asn Leu Lys Thr Ala Leu Glu Lys
          420          425          430
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<210> 1937
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 <212> PRT
 <213> Homo sapiens

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35          40          45
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<211> 486
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<210> 1939
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			20					25					30		
Cys	Cys	Trp	Gly	Tyr	Pro	Ser	Pro	Arg	Ser	Thr	Trp	Asn	Pro	Asp	Arg
		35					40					45			
Arg	Phe	Trp	Thr	Pro	Gln	Thr	Gly	Pro	Gly	Glu	Gly	Arg	His	Glu	Arg
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His Thr Gln Thr Gln Asn His Thr Ala Ser Pro Arg Ser Pro Val Met
 65 70 75 80
 Glu Ser Pro Lys Lys Lys Asn Gln Gln Leu Lys Val Gly Ile Leu His
 85 90 95
 Leu Gly Ser Arg Gln Lys Lys Ile Arg Ile Gln Leu Arg Ser Gln Cys
 100 105 110
 Ala Thr Trp Lys Val Ile Cys Lys Ser Cys Ile Ser Gln Thr Pro Gly
 115 120 125
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 145 150 155 160

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<211> 486

<212> DNA

<213> Homo sapiens

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 gagagcccca aaaagaagaa ccagcagctg aaagtcggga tcctacacct gggcagcaga 300
 cagaagaaga tcaggataca gctgagatcc cagtgcgcga catggaaggt gatctgcaag 360
 agctgcatca gtcaaaccacc ggggataaat ctggatttgg gttccggcgt caaggtgaag 420
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<210> 1943

<211> 20

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<400> 1943

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<210> 1949

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<210> 1950

<211> 20

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<210> 1951

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<210> 1952

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<213> Homo sapiens

<400> 1952

Gly Tyr Pro Ser Pro Arg Ser Thr Trp Asn Pro Asp Arg Arg Phe Trp
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<210> 1953
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<210> 1954
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<210> 1956
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<210> 1957
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<400> 1957

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<210> 1971
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<210> 1972
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<400> 1973
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[illegible]

